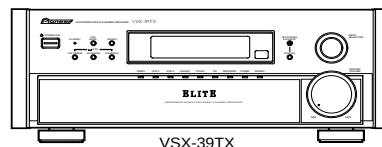


Service Manual

Pioneer



ORDER NO.
RRV2295

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-39TX

VSX-37TX

VSX-36TX

VSX-D909S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model				Power Requirement	Remarks
	VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S		
KU/CA	○	○	○	○	AC120V	

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE N V Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936
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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

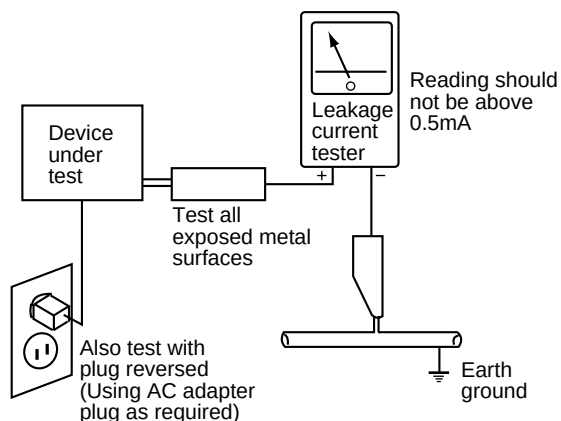
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

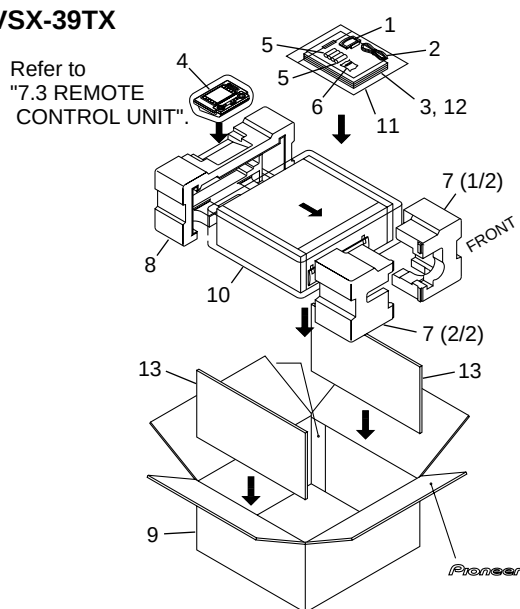
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

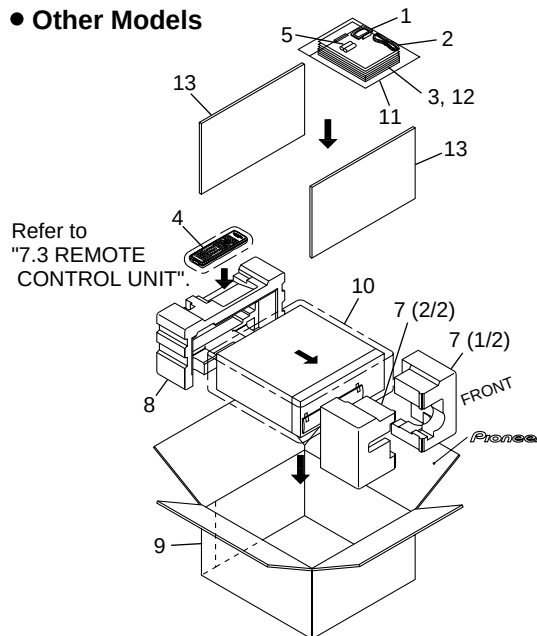
NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 ● The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 ● Screws adjacent to ▼ mark on the product are used for disassembly.

2.1 PACKING

● VSX-39TX



● Other Models



(1) PACKING PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	AM Loop Antenna	ATB7009		8	Rear Pad	See Contrast table (2)
	2	FM Wire Antenna	ADH7007		9	Packing Case	See Contrast table (2)
	3	Operating Instructions (English)	See Contrast table (2)		10	Packing Sheet	RHC1023
	4	Remote Control Unit	See Contrast table (2)	NSP	11	Polyethylene Bag (0.03×230×340)	Z21-038
NSP	5	Alkaline Dry Cell Battery (LR6, AA)	VEM1021	NSP	12	Warranty Card	See Contrast table (2)
	6	Cushion for Remote (for Remote Control Unit)	See Contrast table (2)		13	Spacer	See Contrast table (2)
	7	Front Pad	See Contrast table (2)				

(2) CONTRAST TABLE

VSX-39TX, VSX-37TX, VSX-36TX and VSX-D909S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S	
	3	Operating Instructions (English)	ARB7230	ARB7231	ARB7231	ARB7232	
	4	Remote Control Unit (39)	AXD7254	Not used	Not used	Not used	
	4	Remote Control Unit (36)	Not used	AXD7257	AXD7257	Not used	
	4	Remote Control Unit (909S)	Not used	Not used	Not used	AXD7278	
	6	Cushion for Remote	AXG7080	Not used	Not used	Not used	
	7	Front Pad 29	AHA7255	Not used	Not used	Not used	
	7	Front Pad 26	Not used	AHA7253	AHA7253	AHA7253	
	8	Rear Pad 29	AHA7256	Not used	Not used	Not used	
	8	Rear Pad 26	Not used	AHA7254	AHA7254	AHA7254	
	9	Packing Case 39TX	AHD7882	Not used	Not used	Not used	
	9	Packing Case 37TX	Not used	AHD7881	Not used	Not used	
	9	Packing Case 36TX	Not used	Not used	AHD7880	Not used	
	9	Packing Case 909S	Not used	Not used	Not used	AHD7883	
NSP	12	Warranty Card EL	ARY1026	ARY1026	ARY1026	Not used	
NSP	12	Warranty Card PA	Not used	Not used	Not used	ARY7045	
	13	Spacer 29	AHB7033	Not used	Not used	Not used	
	13	Spacer 26	Not used	AHB7032	AHB7032	AHB7032	



(1) EXTERIOR PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	EXTRA-5.1 Assy	See Contrast table (2)		46	COMPONENT Assy	AWX7635
NSP	2	EXTERNAL IN Assy	See Contrast table (2)		47	TRIM Assy	AWX7655
NSP	3	A-PINJACK Assy	See Contrast table (2)	NSP	48	Panel Stay	See Contrast table (2)
	4	CONNECTION Assy	AWX7313		49	PC Support	VEC1549
	5	MAIN CONTROL Assy	See Contrast table (2)	NSP	50	PCB Holder	AEC7057
	6	TRANS 2-1 ASSY	See Contrast table (2)	NSP	51	PCB Holder	PNW2100
	7	DIODE Assy	See Contrast table (2)	NSP	52	PCB Mould	AMR1525
	8	SP/PS Assy	See Contrast table (2)		53	PCB Spacer	AEC1372
	9	REGULATOR Assy	AWX7310		54	Rear Panel	See Contrast table (2)
	10	TRANS 1 Assy	AWX7316		55	Shield Case	See Contrast table (2)
	11	TRANS 2-2 Assy	AWX7366		56	Side Board 29 L	See Contrast table (2)
	12	VIDEO Assy	See Contrast table (2)		57	Side Board 29 R	See Contrast table (2)
	13	S-VIDEO Assy	See Contrast table (2)		58	Side Escutcheon L	See Contrast table (2)
	14	VOLUME Assy	See Contrast table (2)		59	Side Escutcheon R	See Contrast table (2)
	15	PRIMARY Assy	AWX7311		60	Side Sash L 29	See Contrast table (2)
	16	RF/DIGITAL IN Assy	See Contrast table (2)		61	Side Sash R 29	See Contrast table (2)
NSP	17	OPT OUT Assy	AWX7643		62	Stud Cover	AEC7105
	18	DSP Assy	See Contrast table (2)		63	Terminal Screw	AKE-031
	19	V-AMP Assy	See Contrast table (2)	NSP	64	Under Base 29	See Contrast table (2)
△	20	AC Power Cord	See Contrast table (2)	NSP	65	Binder (BK-1)	ZCA-BK1
△	21	Power Transformer (T1)	ATS7252		66	Screw	BBT30P080FCC
	22	FM/AM TUNER Unit	AXX7046		67	Screw	BBZ30P080FZK
△	23	Fuse (FU1 : 10A)	VEK1029		68	Screw	ABA1193
△	24	Fuse (FU4 : 2.5A)	REK1079		69	Screw	IBZ30P080FCC
△	25	Fuse (FU5 : 2.5A)	REK1079		70	Screw	BBZ30P180FMC
	26	AC Cord Spacer	See Contrast table (2)		71	Screw	ABA1053
	27	Bonnet Case	See Contrast table (2)		72	Screw	BBT30P040FZK
	28	2P Shield with Housing (J24)	ADX7250		73	Screw	FBT40P080FZK
	29	Lead Card 07P (J13)	ADD7161		74	Wood Collar	See Contrast table (2)
	30	Lead Card 13P AD (J22)	ADD7250		75	Screw	See Contrast table (2)
	31	Lead Card 13P AD (J16)	ADD7169		76	Lead Card 06P (J27)	ADD7248
	32	Lead Card 14P (J17)	ADD7165		77	Lead Card 13P (J26)	ADD7251
	33	Lead Card 21P (J18)	ADD7164		78	Lead Card 04P (J29)	ADD7247
	34	Lead Card 23P BD SLD (J12)	ADD7160		79	Lead Card 09P (J28)	ADD7249
	35	Lead Card 26P (J15)	ADD7163		80	Cushion C	PNM1059
	36	Lead Card 28P (J23)	ADD7171		81	Screw	IBZ30P100FCC
	37	Assy Holder	See Contrast table (2)		82	Spacer	See Contrast table (2)
	38	Assy Holder B	AMR7267		83	Remo-con. Cushion	AEB7167
	39	Card Spacer	AEC7133		84	Spacer	AEB7180
	40	Card Spacer	DEC1772		85	S. Cushion	See Contrast table (2)
	41	2CH I/O PJ Assy	AWX7634		86	Sheet	See Contrast table (2)
	42	Cushion 55	PNM1316		87	Locking Card Spacer	VEC1596
NSP	43	Frame	See Contrast table (2)				
	44	Insulator	PNW2766				
	45	Locking Card Spacer	DEC1908				

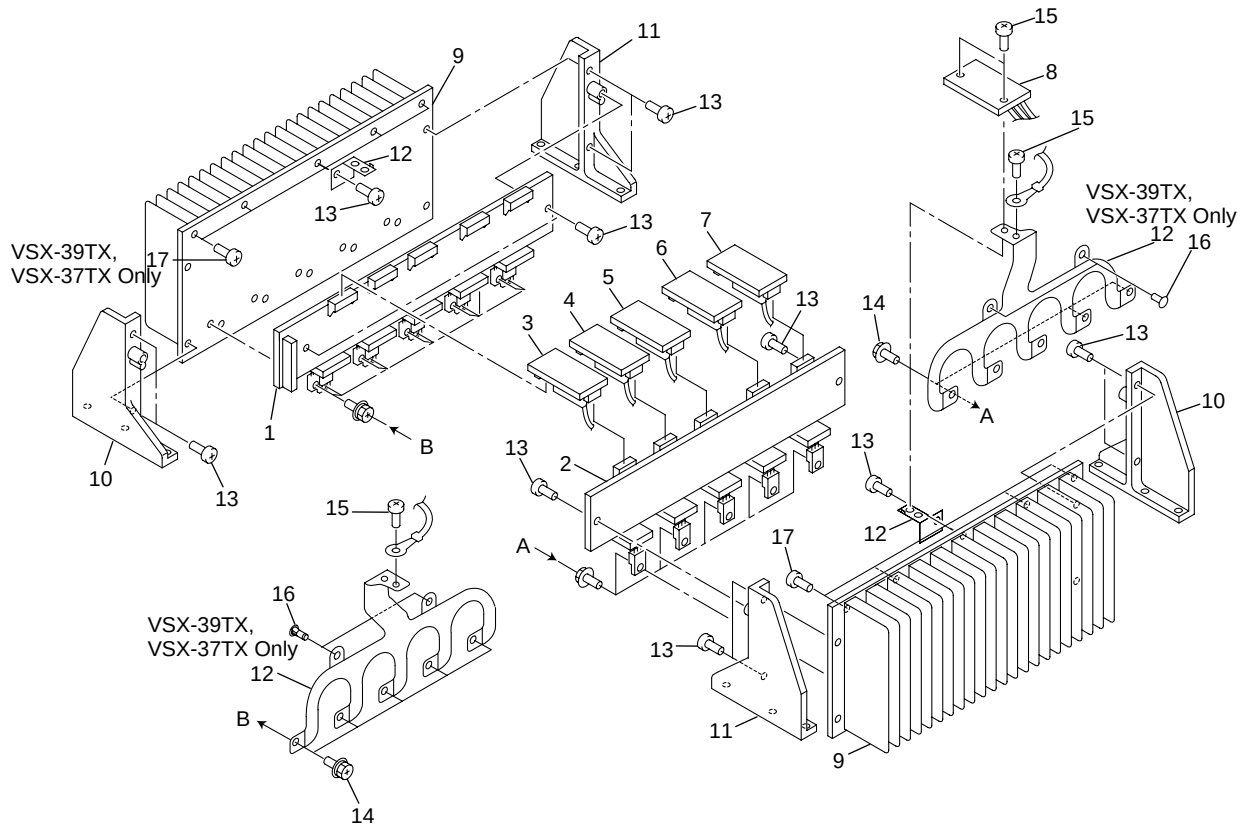
VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

(2) CONTRAST TABLE

VSX-39TX, VSX-37TX, VSX-36TX and VSX-D909S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S	
NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP	1	EXTRA-5.1 Assy	AWX7314	Not used	Not used	Not used	
	2	EXTERNAL IN Assy	Not used	AWX7398	AWX7398	AWX7398	
	3	A-PINJACK Assy	AWX7312	AWX7397	AWX7397	AWX7397	
	5	MAIN CONTROL Assy	AWX7705	AWX7706	AWX7707	AWX7708	
	6	TRANS 2-1 Assy	AWX7659	AWX7694	AWX7695	AWX7695	
	7	DIODE Assy	AWX7660	AWX7697	AWX7697	AWX7697	
	8	SP/PS Assy	AWX7658	AWX7688	AWX7689	AWX7689	
	12	VIDEO Assy	AWX7307	AWX7394	AWX7394	AWX7394	
	13	S-VIDEO Assy	AWX7678	AWX7679	AWX7679	AWX7679	
	14	VOLUME Assy	AWX7367	AWX7367	Not used	Not used	
	16	RF / DIGITAL IN Assy	AWX7637	AWX7638	AWX7642	AWX7642	
	18	DSP Assy	AWX7632	AWX7632	AWX7633	AWX7633	
	19	V-AMP Assy	AWX7729	AWX7309	AWX7309	AWX7409	
	20	AC Power Cord	ADG7028	ADG7028	ADG7024	ADG7024	
△	26	AC Cord Spacer	ANG1153	ANG1153	Not used	Not used	
	26	Cord Stopper	Not used	Not used	CM-22C	CM-22C	
	27	Bonnet Case 29	AZN7790	Not used	Not used	Not used	
	27	Bonnet Case 26	Not used	AZN7789	AZN7789	AZN7789	
	37	Assy Holder	ANG7322	ANG7321	ANG7321	ANG7321	
	41	2CH I/O PJ Assy	AWX7634	AWX7646	AWX7646	AWX7646	
	43	Frame 29	ANG7243	Not used	Not used	Not used	
	43	Frame 26	Not used	ANG7238	ANG7238	ANG7238	
	46	COMPONENT Assy	AWX7635	AWX7636	AWX7636	AWX7636	
	48	Panel Stay 29	AND7032	Not used	Not used	Not used	
	48	Panel Stay 26	Not used	AND7031	AND7031	AND7031	
	54	Rear Panel 39	ANC7945	Not used	Not used	Not used	
	54	Rear Panel 37	Not used	ANC7944	Not used	Not used	
	54	Rear Panel 36	Not used	Not used	ANC7943	Not used	
NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP NSP	54	Rear Panel D909S	Not used	Not used	Not used	ANC7946	
	55	Shield Case 39	ANK7079	Not used	Not used	Not used	
	55	Shield Case 36	Not used	ANK7078	ANK7054	ANK7054	
	56	Side Board 29 L	AMS7013	Not used	Not used	Not used	
	57	Side Board 29 R	AMS7014	Not used	Not used	Not used	
	58	Side Escutcheon L 29	AAK7635	Not used	Not used	Not used	
	58	Side Escutcheon L 26	Not used	AAK7633	AAK7633	AAK7633	
	59	Side Escutcheon R 29	AAK7636	Not used	Not used	Not used	
	59	Side Escutcheon R 26	Not used	AAK7634	AAK7634	AAK7634	
	60	Side Sash L 29	AAH7019	Not used	Not used	Not used	
	61	Side Sash R 29	AAH7020	Not used	Not used	Not used	
	64	Under Base 29	ANA7091	Not used	Not used	Not used	
	64	Under Base 26	Not used	ANA7089	ANA7089	ANA7089	
	74	Wood Collar	AEC1165	Not used	Not used	Not used	
	75	Screw	ABA1086	Not used	Not used	Not used	
	82	Spacer	AEB7179	Not used	Not used	Not used	
	85	S. Cushion	AEB7178	Not used	Not used	Not used	
	86	Sheet	AED7035	Not used	Not used	Not used	

2.3 HEAT SINK SECTION



(1) HEAT SINK SECTION PARTS LIST

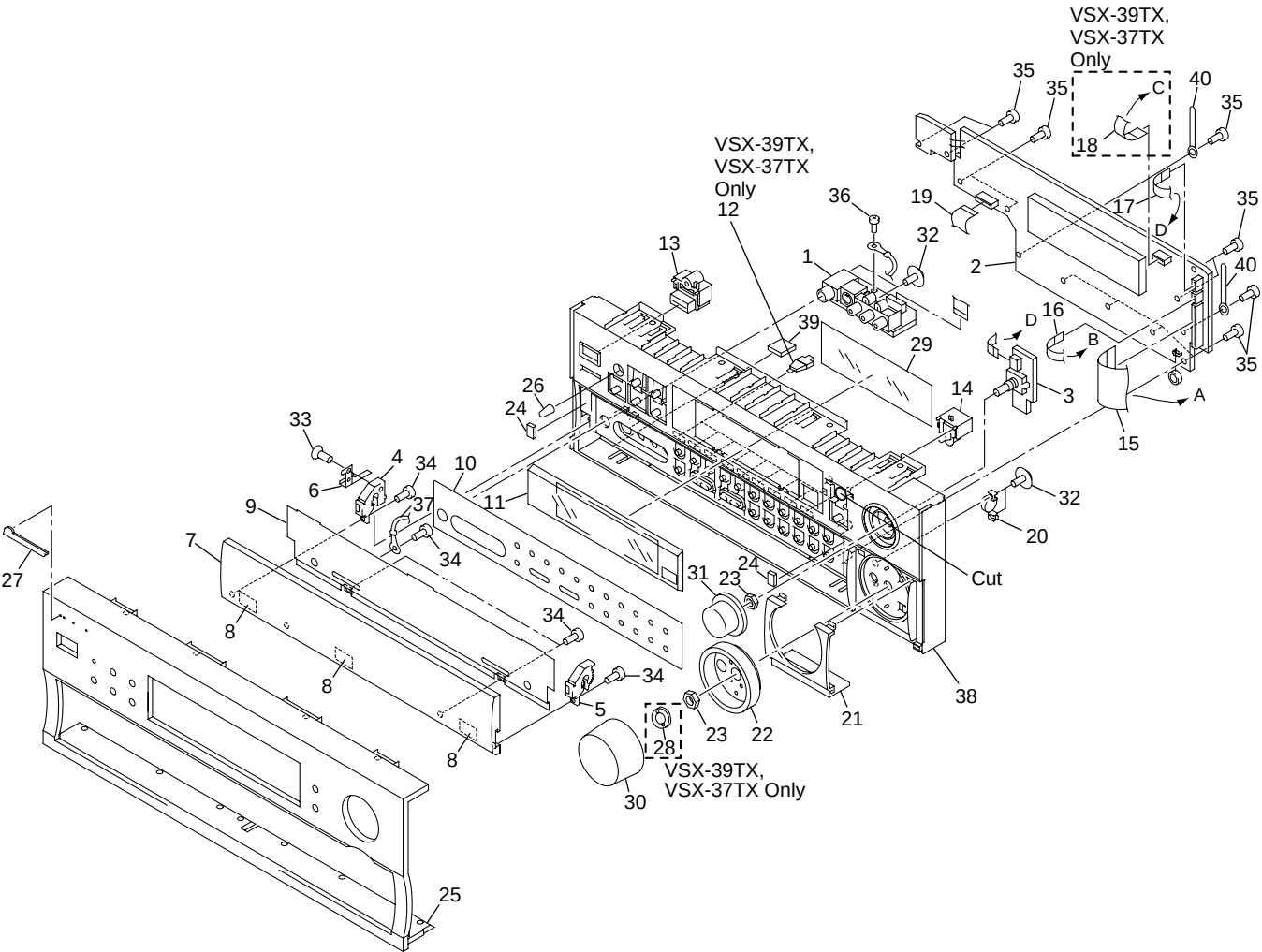
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	C-AMP N Assy	AWX7681		11	Heat Sink Holder B	AMR7256
NSP	2	C-AMP-P Assy	AWX7680	NSP	12	Power Supply Plate	See Contrast table (2)
NSP	3	OUTPUT-SL Assy	AWX7685		13	Screw	See Contrast table (2)
NSP	4	OUTPUT-FL Assy	AWX7682		14	Screw	ABA1082
					15	Screw	IBZ30P080FCC
	5	OUTPUT-C Assy	AWX7684		16	Card Spacer	See Contrast table (2)
NSP	6	OUTPUT-FR Assy	AWX7683		17	Screw	See Contrast table (2)
NSP	7	OUTPUT-SR Assy	AWX7686				
	8	VL-TERMINAL Assy	AWX7657				
NSP	9	Heat Sink	See Contrast table (2)				
	10	Heat Sink Holder A	AMR7255				

(2) CONTRAST TABLE

VSX-39TX, VSX-37TX, VSX-36TX and VSX-D909S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S	
NSP	9	Heat Sink D10	ANH7103	ANH7103	Not used	Not used	
NSP	9	Heat Sink 26	Not used	Not used	ANH7102	ANH7102	
NSP	12	Power Supply Plate	ANG7280	ANG7280	ANG7240	ANG7240	
	13	Screw	IBZ30P080FCC	IBZ30P080FCC	BBZ30P080FZK	BBZ30P080FZK	
NSP	16	Card Spacer	DNK2769	DNK2769	Not used	Not used	
	17	Screw	BBZ40P080FCC	BBZ40P080FCC	Not used	Not used	

2.4 FRONT PANEL SECTION



(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	H. PHONE/F. VIDEO Assy	AWX7342		21	Sub Panel	See Contrast table (2)
	2	DISPLAY Assy	See Contrast table (2)		22	Volume Ring	See Contrast table (2)
	3	ROTARY ENCODER Assy	See Contrast table (2)		23	Nut	NK90FUC
	4	Door Hinge 26 L	AMR7252		24	Door Cusion B	AEB7152
	5	Door Hinge 26 R	AMR7253		25	Front Panel	See Contrast table (2)
NSP	6	Magnet Angle	ANG7241		26	LED Lens	PNW2019
	7	Door Panel	See Contrast table (2)		27	Name Plate B	PAN1376
NSP	8	Spacer	VEC-244		28	Ring Spacer D5	See Contrast table (2)
NSP	9	Door Plate 26	AAH7024		29	FL Sheet 26	AAK7627
	10	Door Sheet	See Contrast table (2)		30	Volume Knob (MASTER VOLUME)	See Contrast table (2)
	11	Display Panel 26	AAK7625		31	Rotary Knob (INPUT SELECTOR)	See Contrast table (2)
	12	Function Lens 27	See Contrast table (2)		32	Screw	ABA7053
	13	Power Button (STANDBY/ON)	AAD7440		33	Screw	PBA1096
	14	MR Button (MULTIROOM)	AAD7514		34	Screw	BPZ30P060FMC
	15	Lead Card 32P (J11)	ADD7159		35	Screw	BPZ30P080FMC
	16	Lead Card 05P (J14)	ADD7254		36	Screw	BBZ30P080FZK
	17	Lead Card 06P (J20)	ADD7167		37	Cord with Plug	ADH7020
	18	Lead Card 08P (J19)	See Contrast table (2)	NSP	38	Panel Base	See Contrast table (2)
	19	Lead Card 12P (J21)	ADD7166		39	Magnet	AMF7002
	20	Damper Assy (60)	AXA7078		40	Cord Clamper	RNH-184

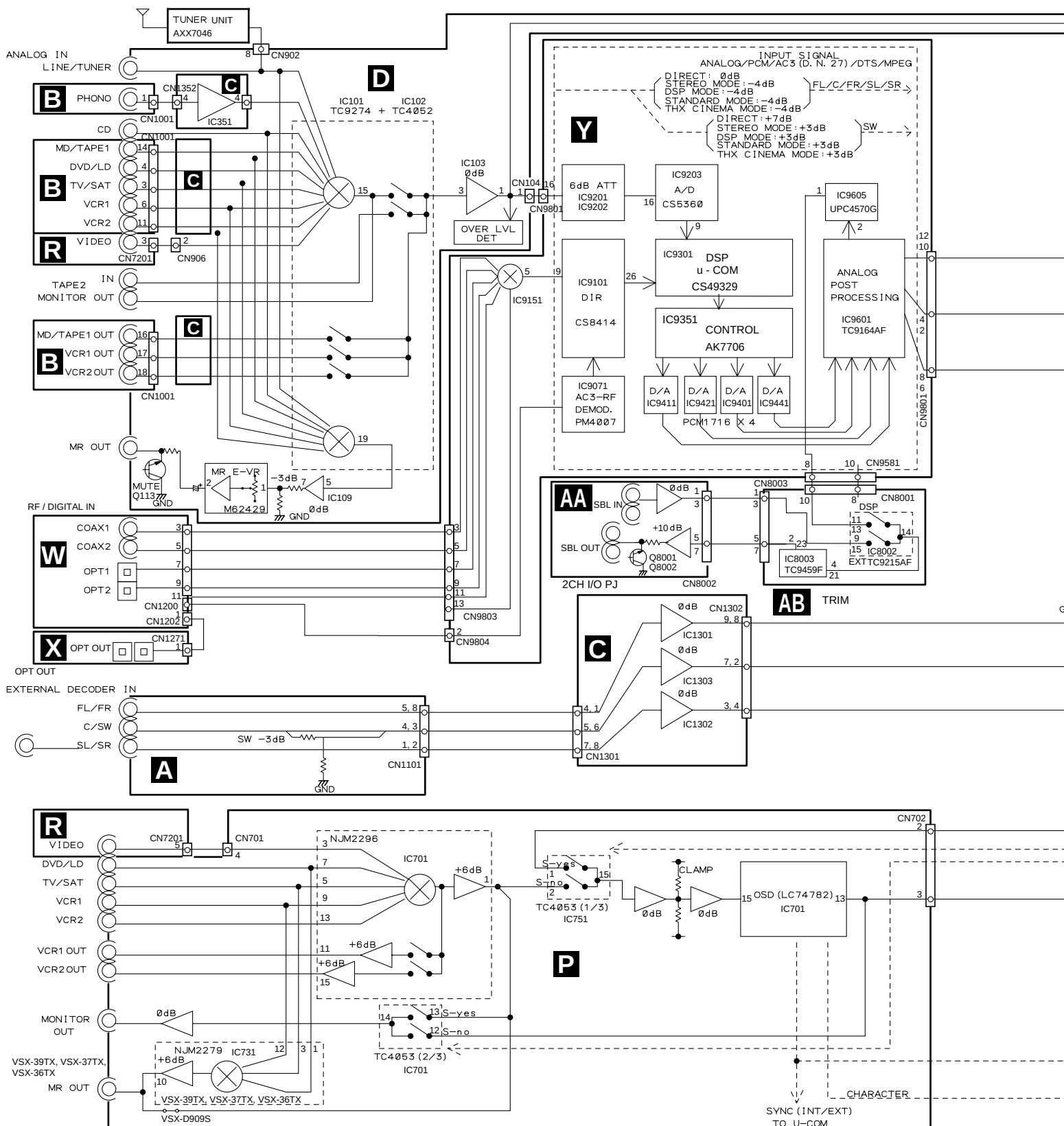
(2) CONTRAST TABLE

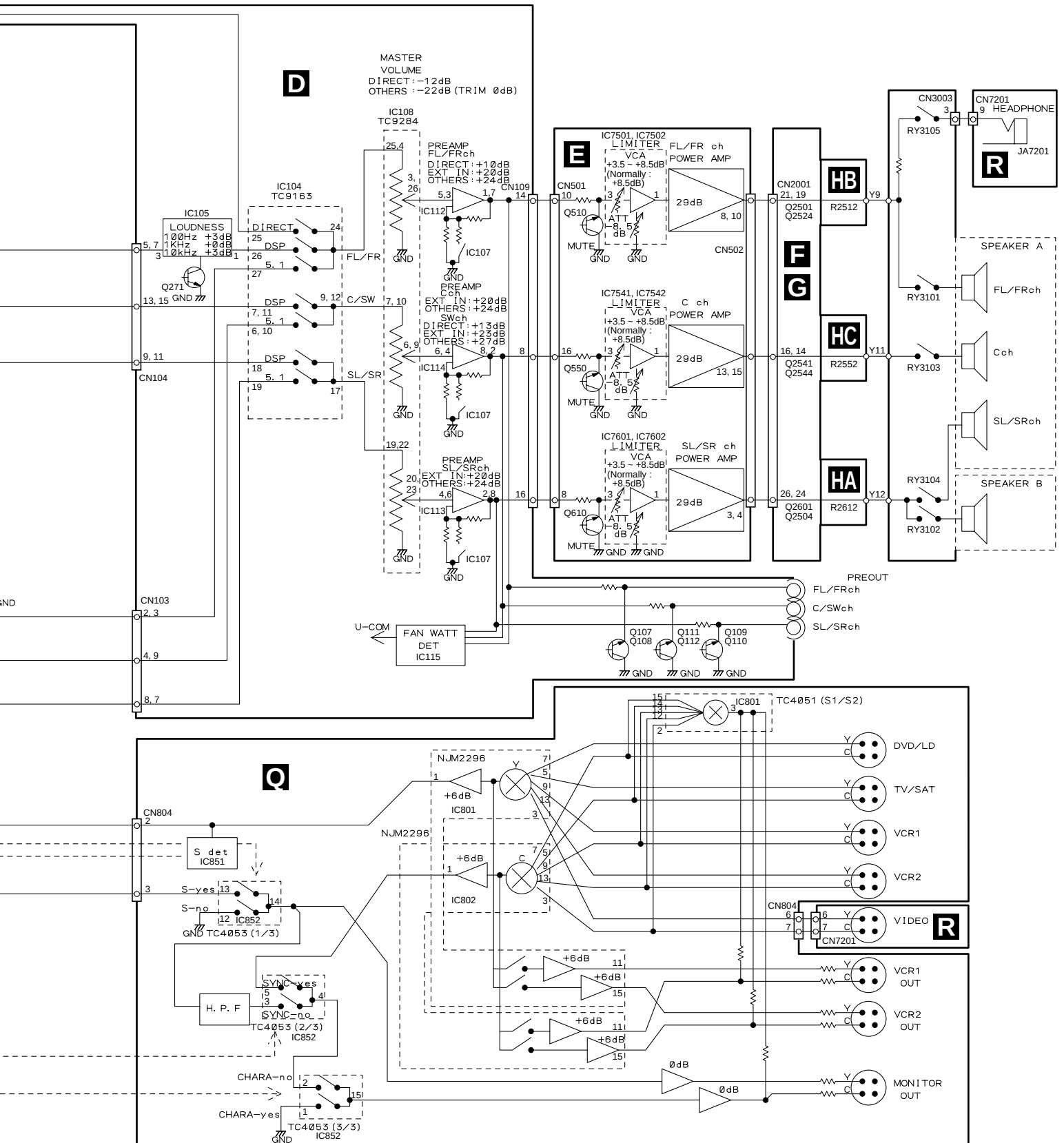
VSX-39TX, VSX-37TX, VSX-36TX and VSX-D909S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.				Remarks
			VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S	
NSP	1	H.PHONE/F.VIDEO Assy	AWX7342	AWX7342	AWX7528	AWX7528	
	2	DISPLAY Assy	AWX7698	AWX7698	AWX7699	AWX7700	
	3	ROTARY ENCODER Assy	AWX7328	AWX7328	AWX7726	AWX7726	
	7	Door Panel 39	AMB7722	AMB7718	AMB7718	Not used	
	7	Door Panel 98SD	Not used	Not used	Not used	AMB7624	
	10	Door Sheet 39	AAK7789	AAK7789	AAK7789	Not used	
	10	Door Sheet D909S	Not used	Not used	Not used	AAK7790	
	12	Function Lens 27	AAK7628	AAK7628	Not used	Not used	
	18	Lead Card 08P (J19)	ADD7168	ADD7168	Not used	Not used	
	21	Sub Panel 29	AMB7622	AMB7622	Not used	Not used	
	21	Sub Panel 26	Not used	Not used	AMB7575	Not used	
	21	Sub Panel 908	Not used	Not used	Not used	AMB7617	
	22	Volume Ring D10	AAH7016	Not used	Not used	Not used	
	22	Volume Ring 26	Not used	AAK7623	AAK7623	AAK7623	
	25	Front Panel 39	AMB7718	Not used	Not used	Not used	
	25	Front Panel 37	Not used	AMB7717	Not used	Not used	
	25	Front Panel 36	Not used	Not used	AMB7716	Not used	
	25	Front Panel D909S	Not used	Not used	Not used	AMB771	
	28	Ring Spacer D5	AWL7038	AWL7038	Not used	Not used	
	30	Volume Knob 27	AAB7194	AAB7194	Not used	Not used	
	30	Volume Knob 26	Not used	Not used	AAB7193	AAB7193	
	31	Rotary Knob 29	AAB7221	AAB7221	Not used	Not used	
	31	Rotary Knob 26	Not used	Not used	AAB7196	AAB7196	
	38	Panel Base 27	AMB7570	AMB7570	Not used	Not used	
	38	Panel Base 26	Not used	Not used	AMB7569	AMB7569	

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

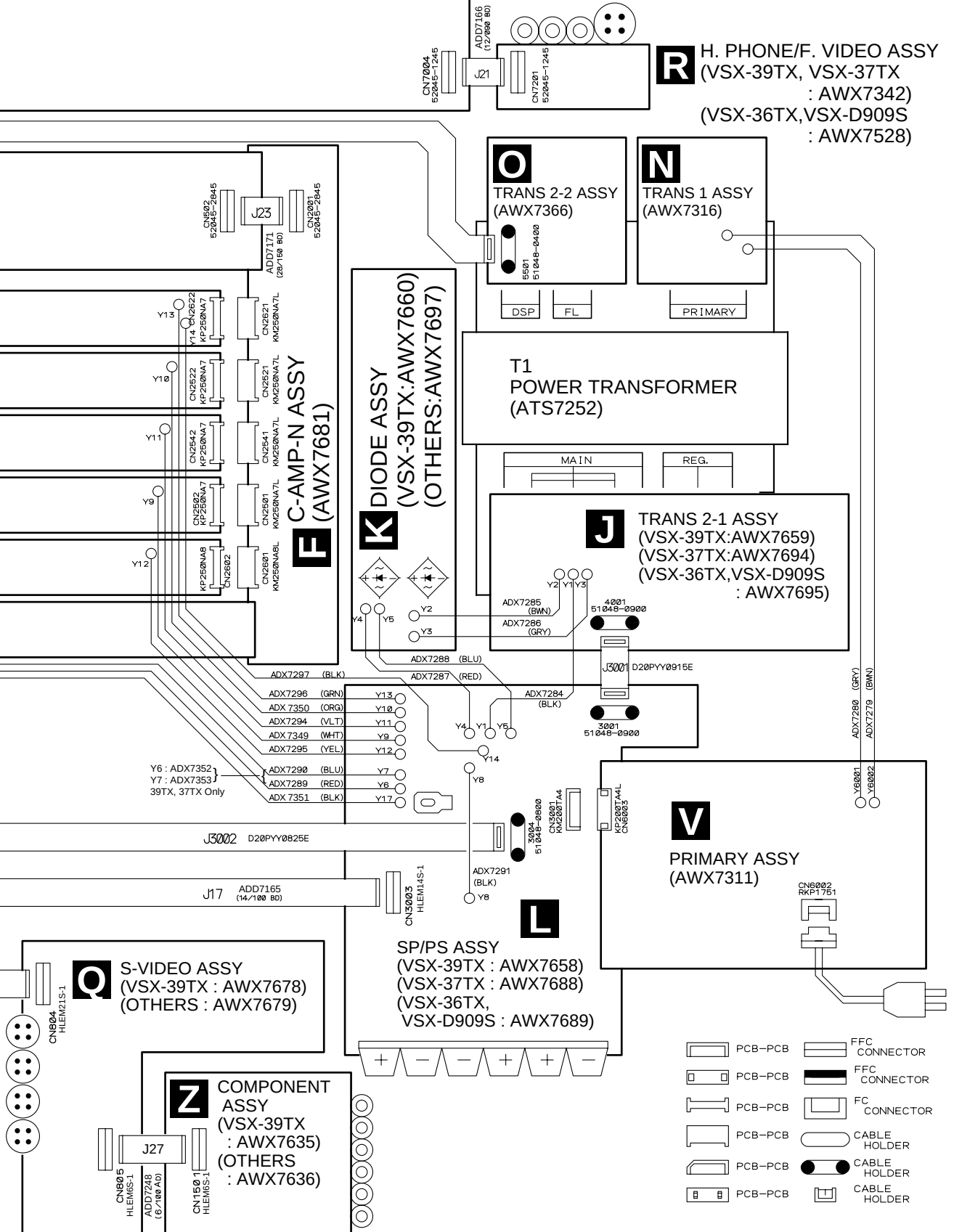
3.1 BLOCK DIAGRAM





Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

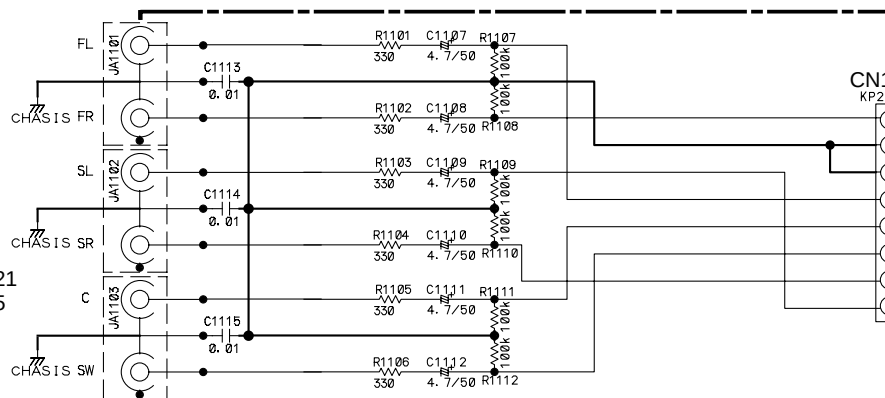
• CAUTION : Heatsink's DC level is equal to +B or -B.
Don't touch them or you will be electrically shocked.



3.3 EXTRA-5.1 (EXTERNAL IN), A-PINJACK and CONNECTION ASSYS

A
EXTRA-5.1 ASSY
(VSX-39TX : AWX7314)
EXTERNAL IN ASSY
(OTHERS : AWX7398)

JA1101-JA1103 ;
VSX-39TX : AKB7121
OTHERS : AKB7095

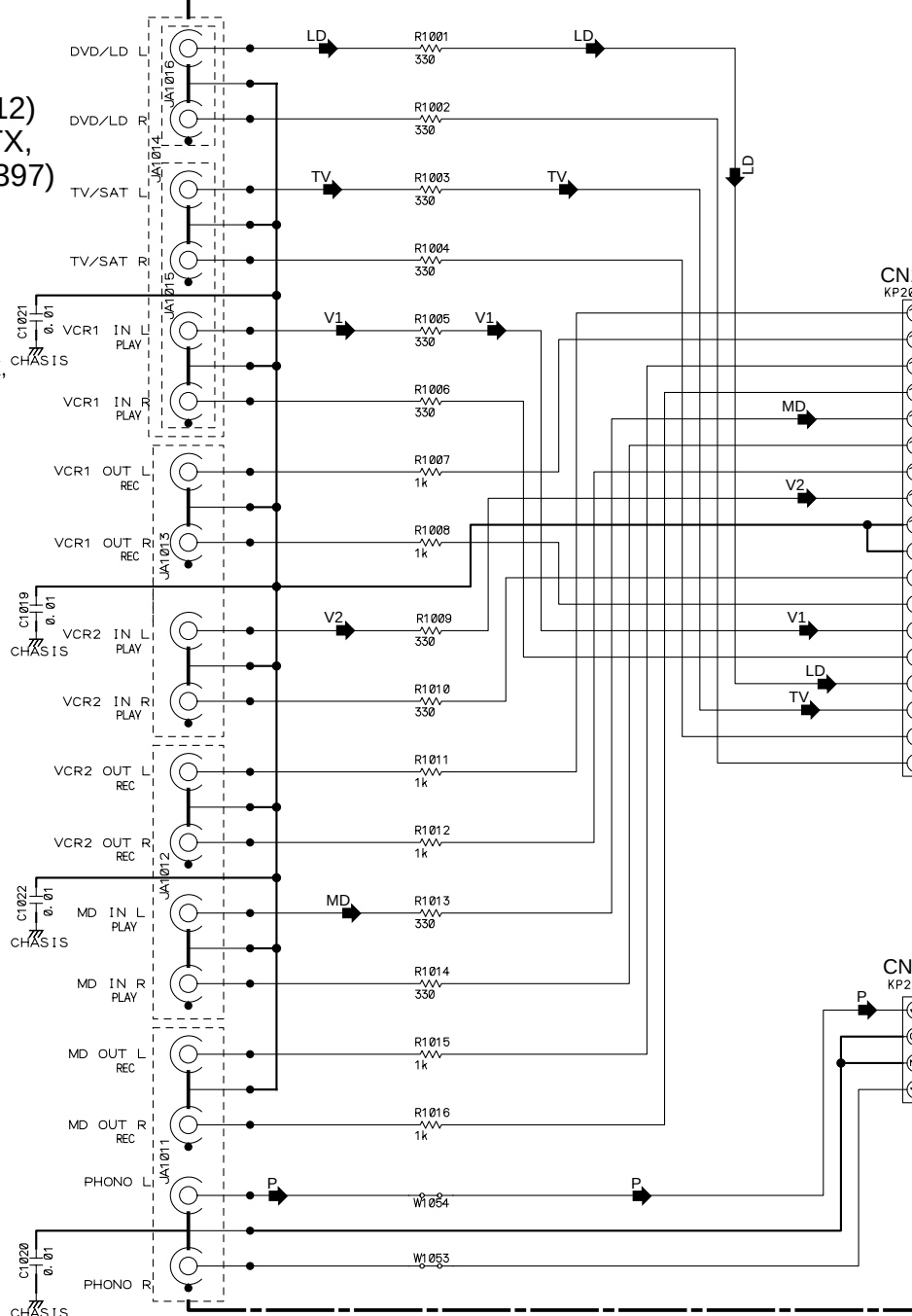


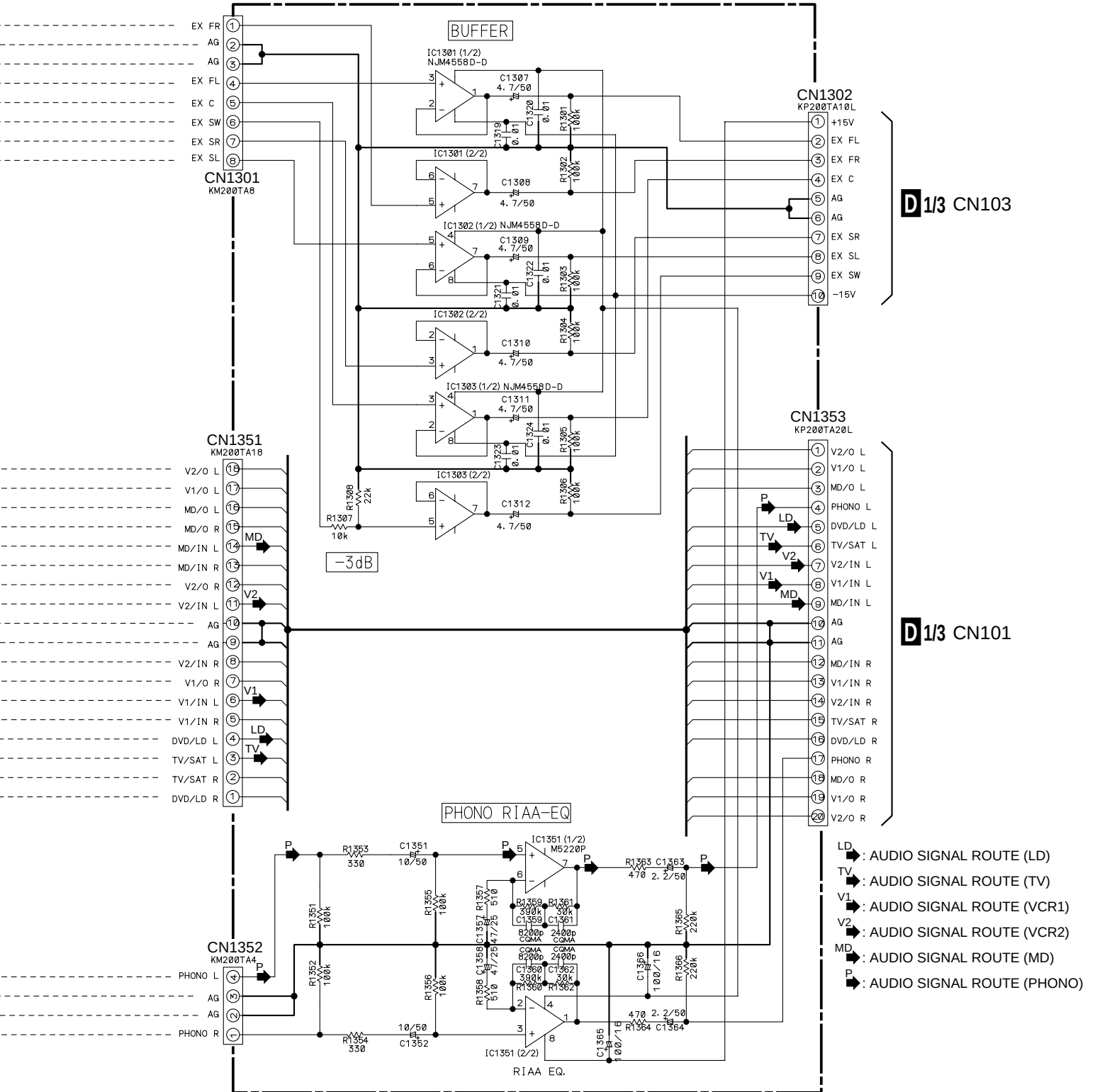
B
A-PINJACK ASSY
(VSX-39TX : AWX7312)
(VSX-37TX, VSX-36TX,
VSX-D909S : AWX7397)

JN1014: AKB7119
(VSX-39TX ONLY)

JA1015: AKB7048
JA1016: AKB7120
(VSX-37TX, VSX-36TX,
VSX-D909S ONLY)

JA1011-JA1013 ;
VSX-39TX : AKB7108
OTHERS : AKB7048



C CONNECTION ASSY (AWX7313)

17

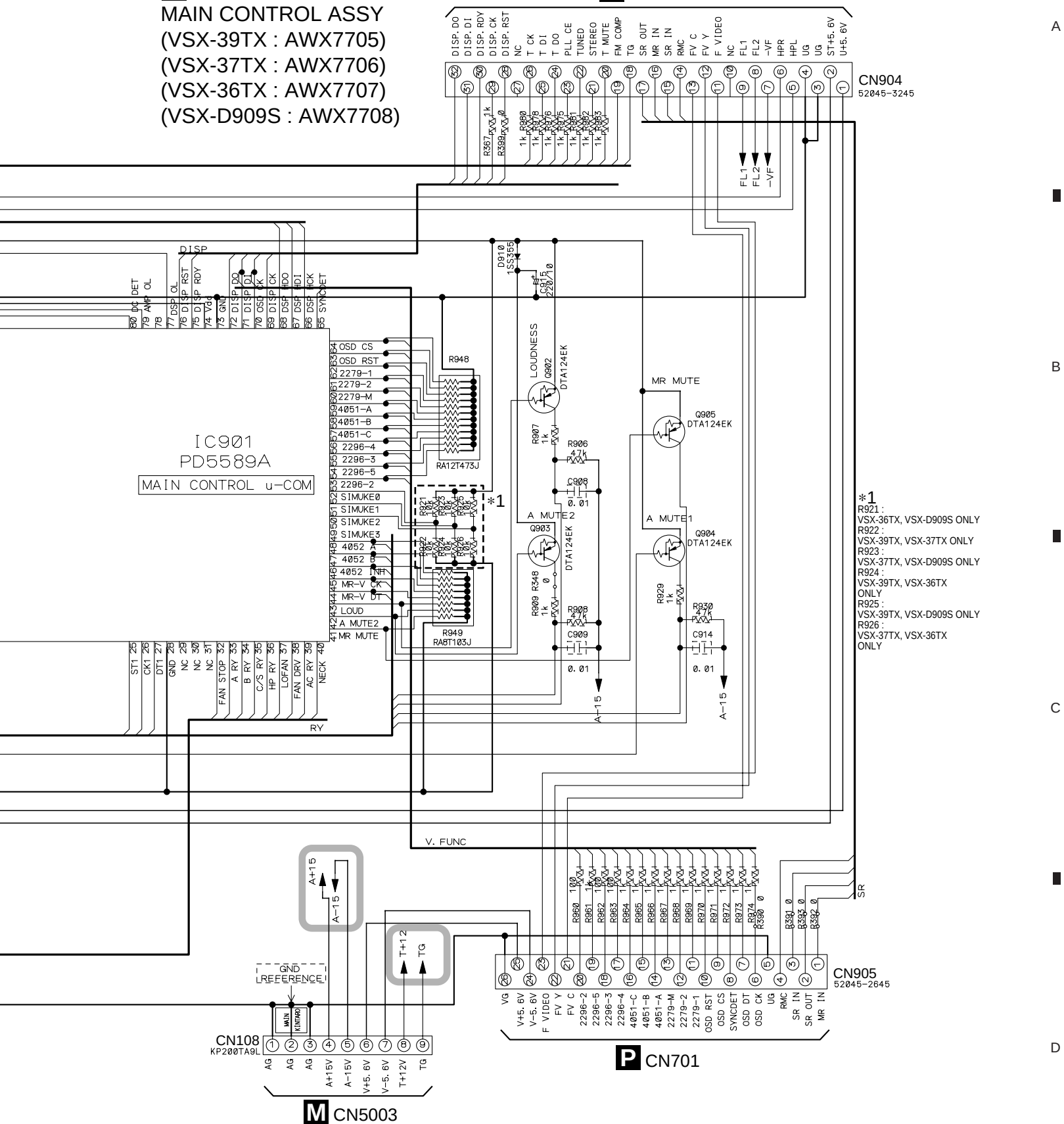
O : The power supply is shown with the marked box.

TU : AUDIO SIGNAL ROUTE (TUNER)

D3/3

MAIN CONTROL ASSY
(VSX-39TX : AWX7705)
(VSX-37TX : AWX7706)
(VSX-36TX : AWX7707)
(VSX-D909S : AWX7708)

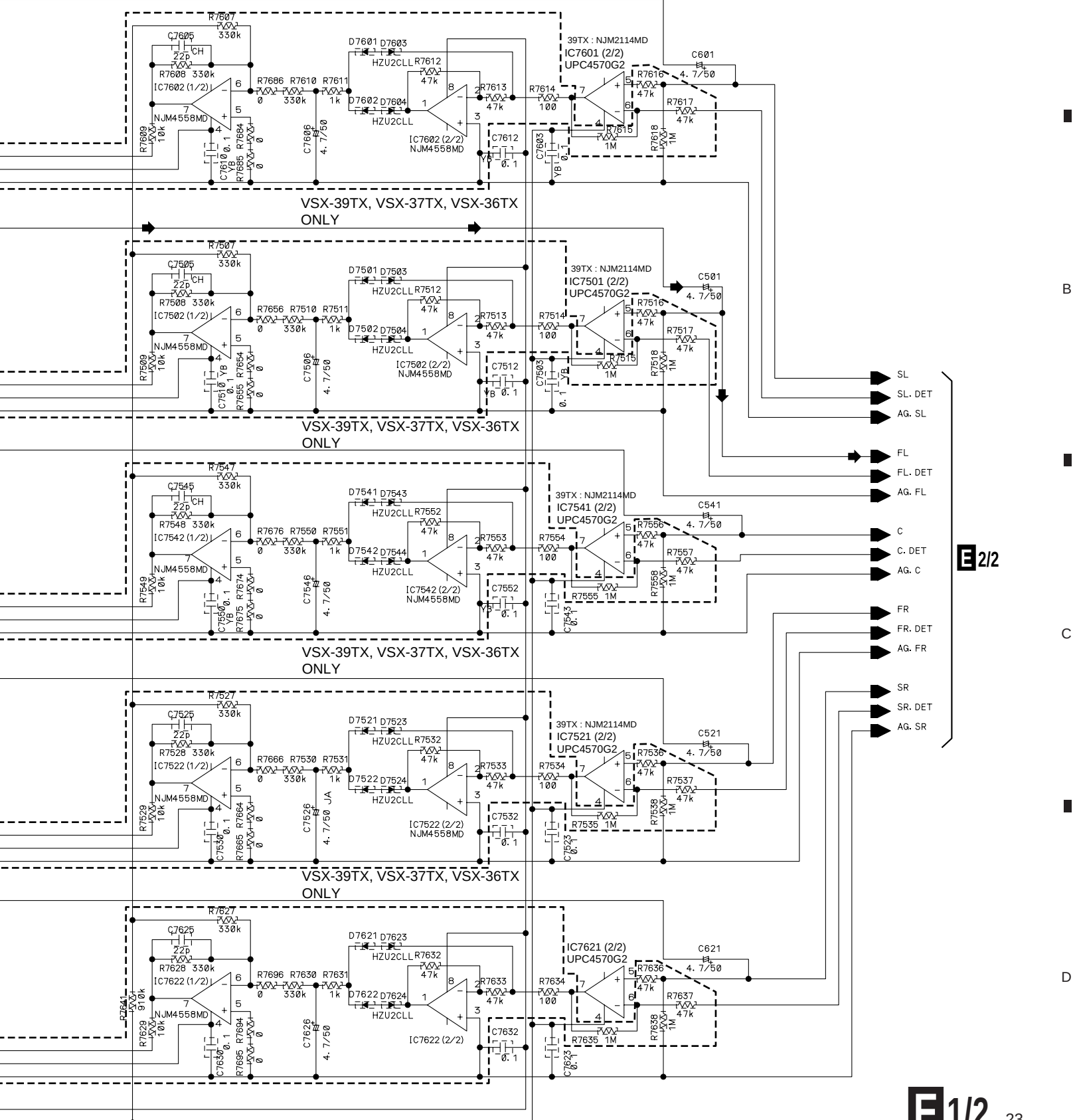
S CN7001



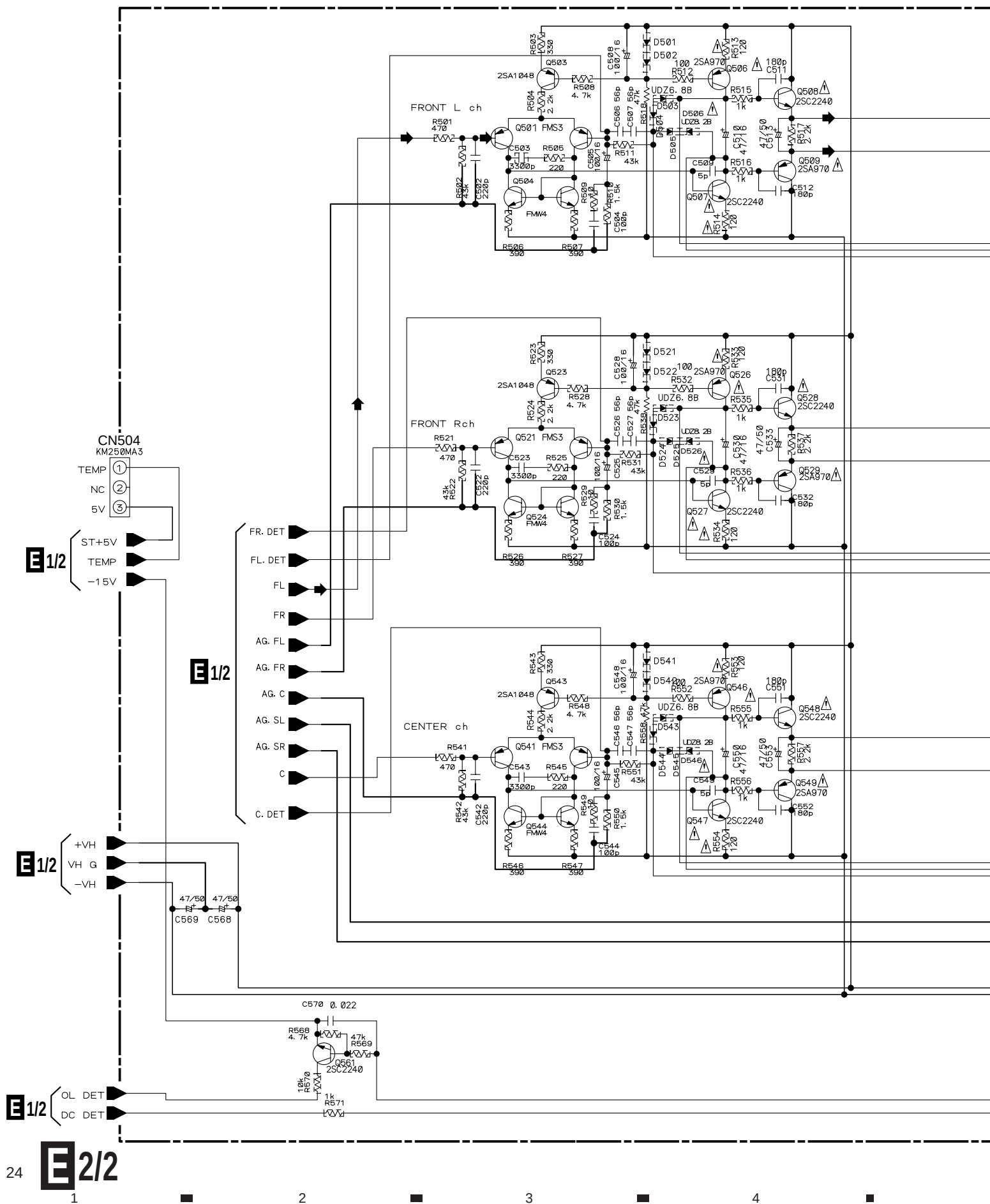
MAIN CHANNEL LIMITER

VSX-39TX, VSX-37TX, VSX-36TX ONLY

➡: AUDIO SIGNAL ROUTE



3.8 V-AMP ASSY (2/2)



E 2/2 V-AMP ASSY

(VSX-39TX : AWX7729)(VSX-37TX, VSX-36TX : AWX7309)
(VSX-D909S : AWX7409)

POWER AMP VOLTAGE AMPLIFYING STAGE

➡: AUDIO SIGNAL ROUTE

- NO MARK DIODE:1SS355
- RESISTOR:1/4W, J%
- NO MARK ELECTROLYTIC CAPACITOR:CEAS
JA:CEJA
- NON ELECTROLYTICAL CAPACITOR:CCCCH TYPE

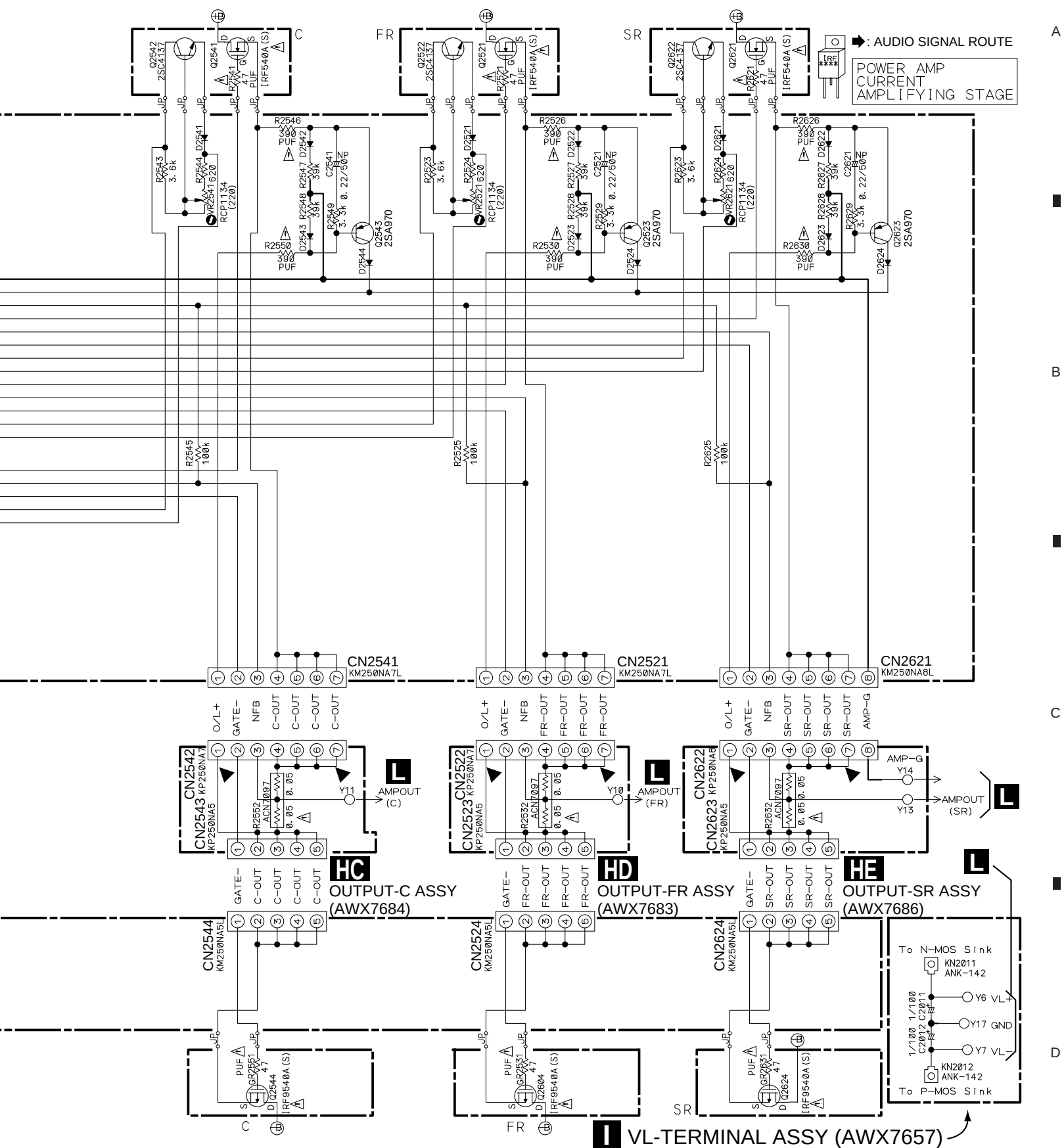
CN502
52045-2845

1 B1+
 2 B1-
 3 G-
 4 NFB
 5 G+
 6 B1+
 7 B1-
 8 G-
 9 NFB
 10 G+
 11 B+
 12 B-
 13 G-
 14 NFB
 15 G+
 16 B1+
 17 B1-
 18 G-
 19 NFB
 20 G+
 21 B1+
 22 B1-
 23 G-
 24 NFB
 25 G+
 26 OL DET
 27 AMP G
 28 DC DET

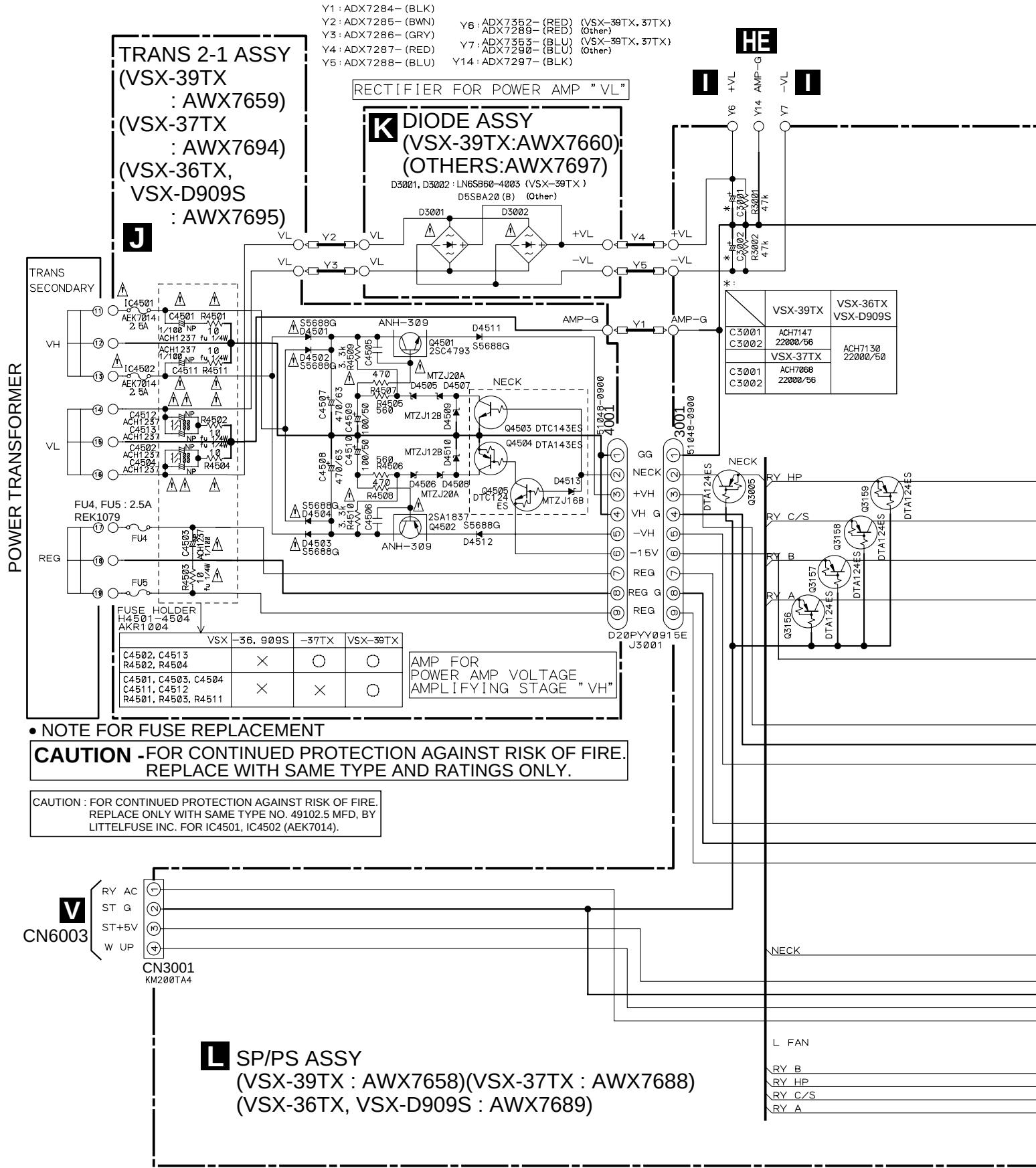
E 1/2

E 1/2

F
CN2001



3.10 TRANS 2-1, DIODE and SP/PS ASSYS

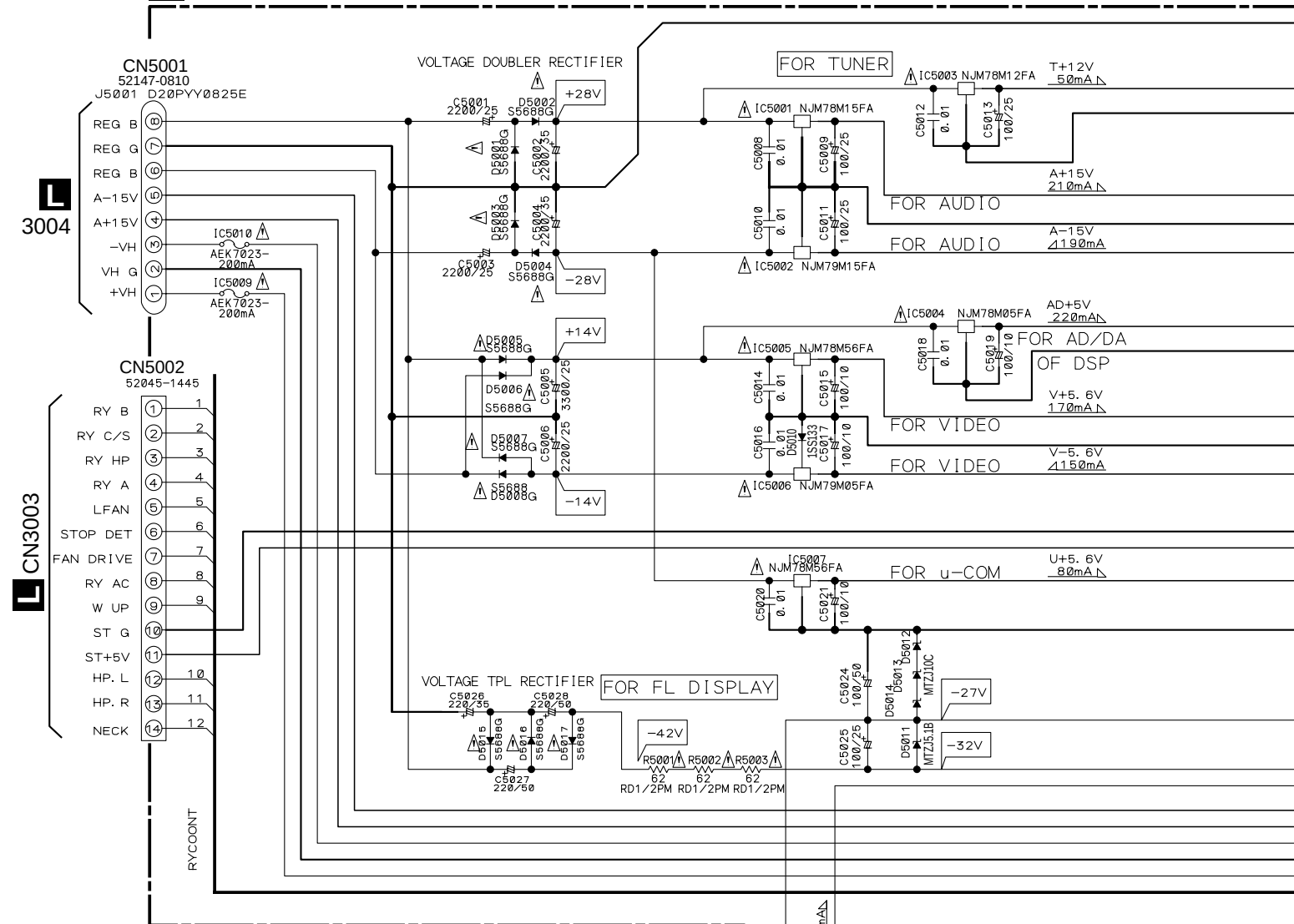


A

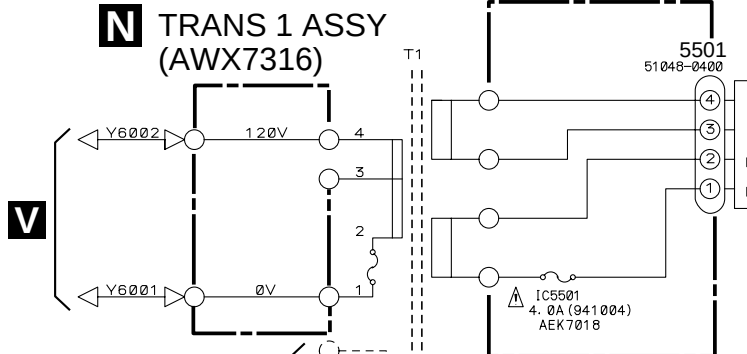


3.11 REGULATOR, TRANS 1 and TRANS 2-2 ASSYS

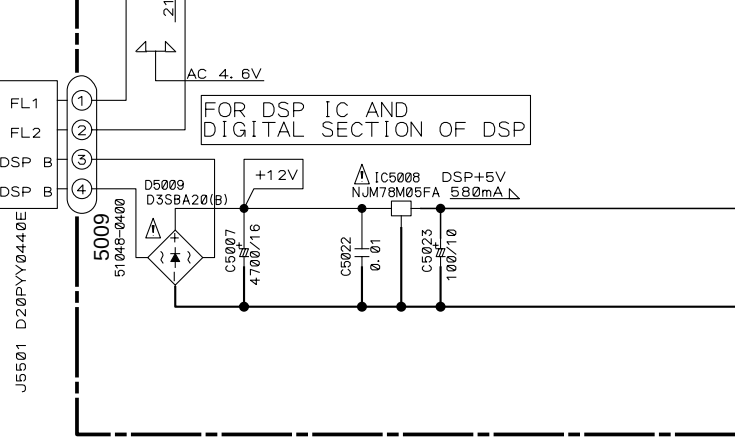
M REGULATOR ASSY (AWX7310)



N TRANS 1 ASSY (AWX7316)



O TRANS 2-2 ASSY (AWX7366)



CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.200 MFD, BY LITTELFUSE INC. FOR IC5009, IC5010 (AEK7023).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.004 MFD, BY LITTELFUSE INC. FOR IC5501 (AEK7018).

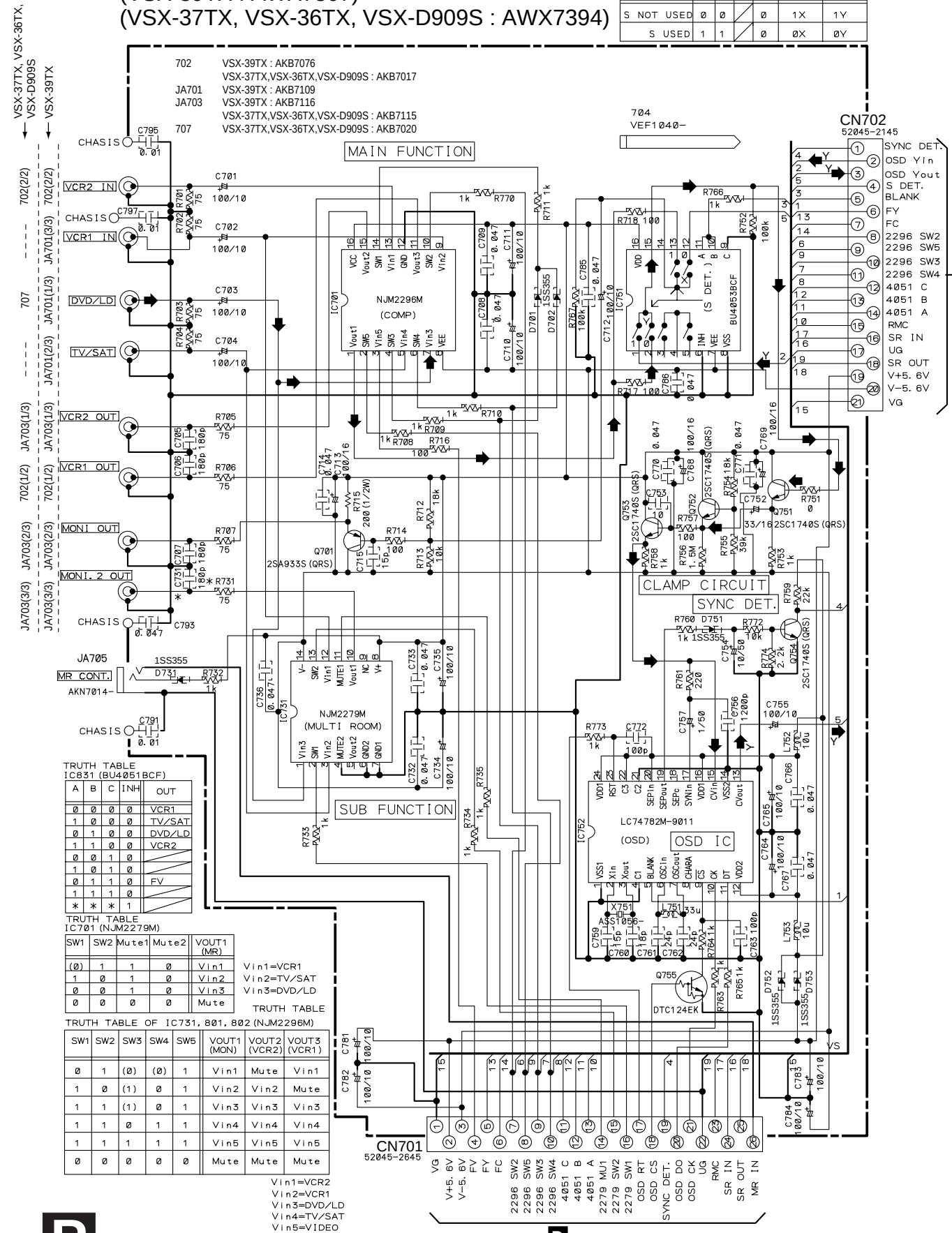
POWER TRANSFORMER

3.12 VIDEO and S-VIDEO ASSYS

P VIDEO ASSY
(VSX-39TX : AWX7307)
(VSX-37TX, VSX-36TX, VSX-D909S : AWX7394)

TRUTH TABLE OF IC751 (BU4053BCF)

CONDITION	A	B	C	INH	X OUT	Y OUT
S NOT USED	0	0	0	0	1X	1Y
S USED	1	1	1	0	0X	0Y



A



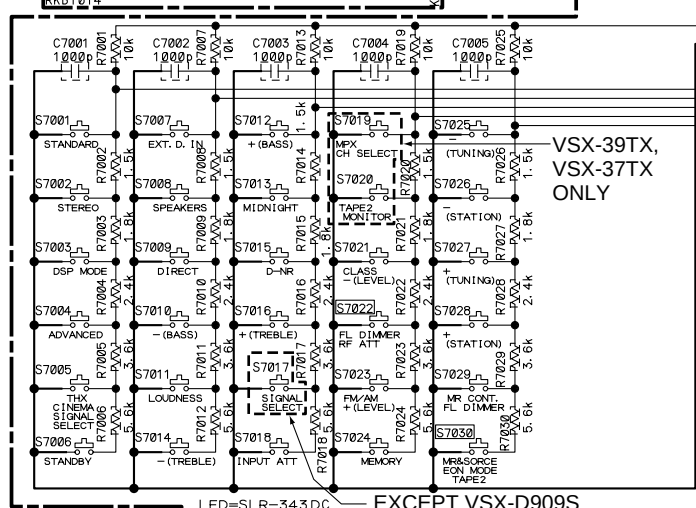
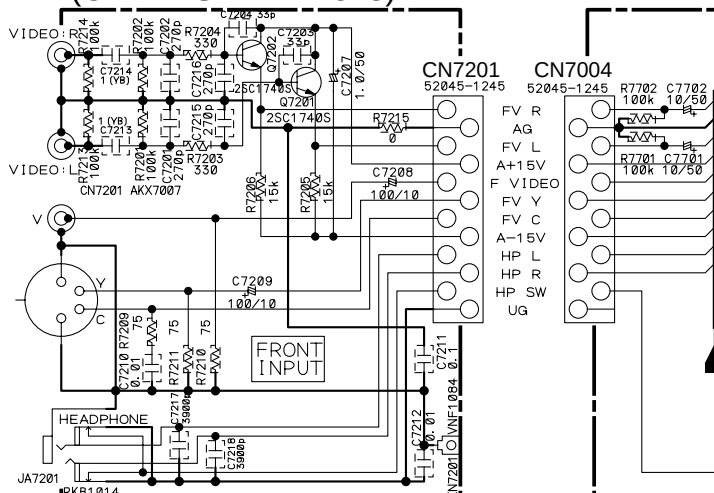
C REC MUTE

Q

3.13 H. PHONE/F. VIDEO, DISPLAY, ROTARY ENCODER and VOLUME ASSYS

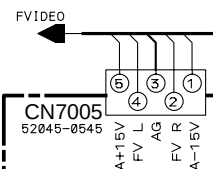
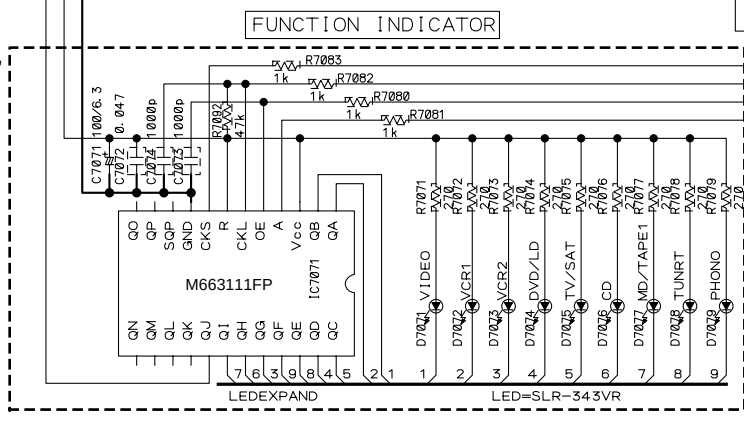
R H. PHONE/F. VIDEO ASSY
(VSX-39TX, VSX-37TX : AWX7342)
(OTHERS : AWX7528)

S DISPLAY ASSY
(VSX-39TX, VSX-37TX : AWX7698)
(VSX-36TX : AWX7699)
(VSX-D909S : AWX7700)



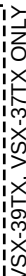
- S7001 : STANDARD
- S7002 : STEREO
- S7003 : DSP MODE
- S7004 : ADVANCED
- S7005 : THX CINEMA
- S7006 : STAND BY/ON
- S7007 : EXTERNAL
DECODER IN
- S7008 : SPEAKERS
- S7009 : DIRECT
- S7010 : BASS -
- S7011 : LOUDNESS
- S7012 : BASS +
- S7013 : MIDNIGHT
- S7014 : TREBLE -
- S7015 : DIGITAL NR
- S7016 : TREBLE +
- S7017 : SIGNAL SELECT
- S7018 : INPUT ATT
- S7019 : MPX
- S7020 : TAPE2 MONITOR
- S7021 : CLASS
- S7022 : FL DIMMER
- S7023 : FM/AM
- S7024 : MEMORY
- S7025 : TUNING -
- S7026 : STATION -
- S7027 : TUNING +
- S7028 : STATION +
- S7029 : CONTROL
- S7030 : MULTI-ROOM
& SOURCE

VSX-39TX,
VSX-37TX
ONLY



D 1/3 CN906

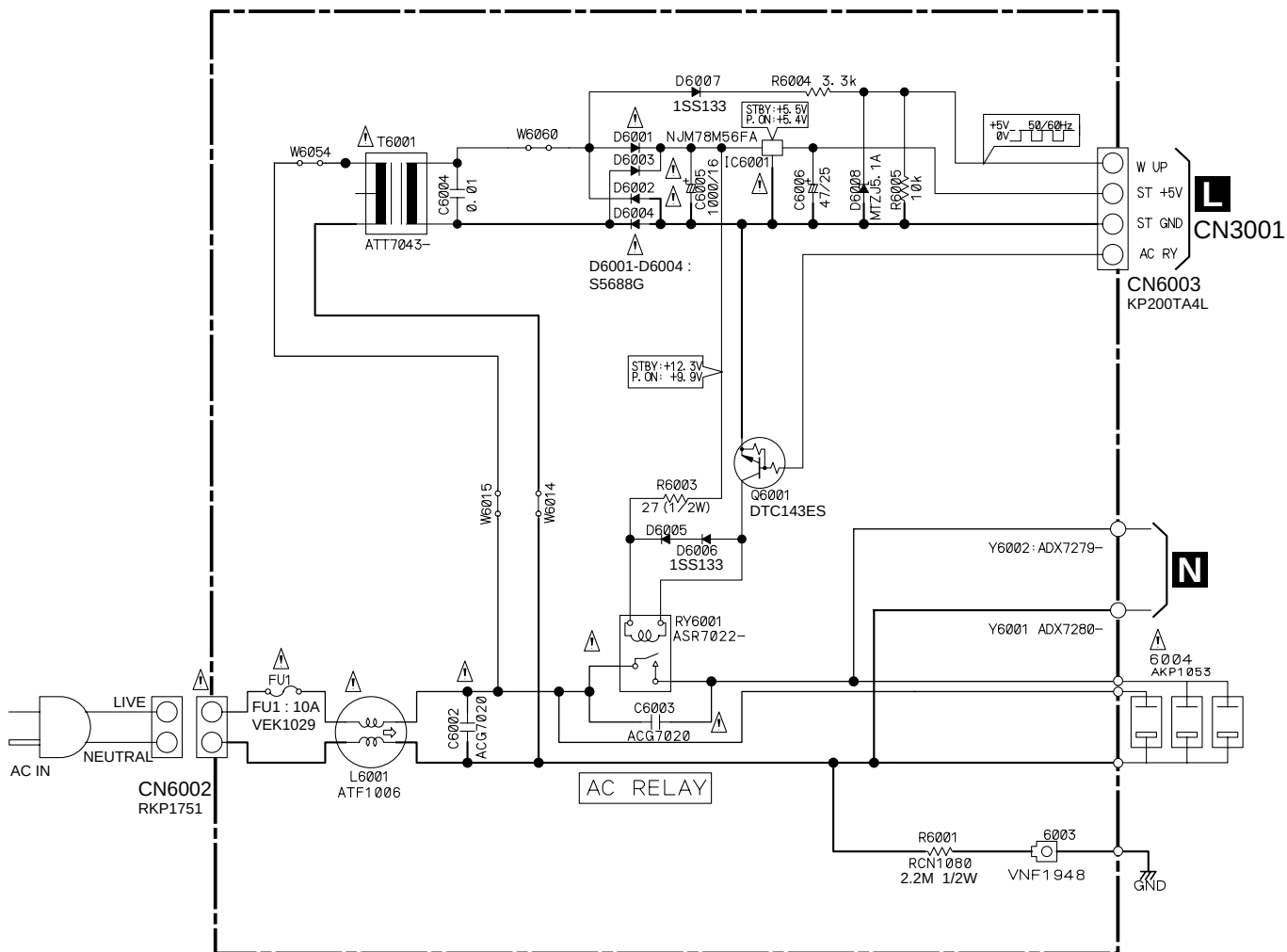
D



S T U

3.14 PRIMARY ASSY

V PRIMARY ASSY (AWX7311)

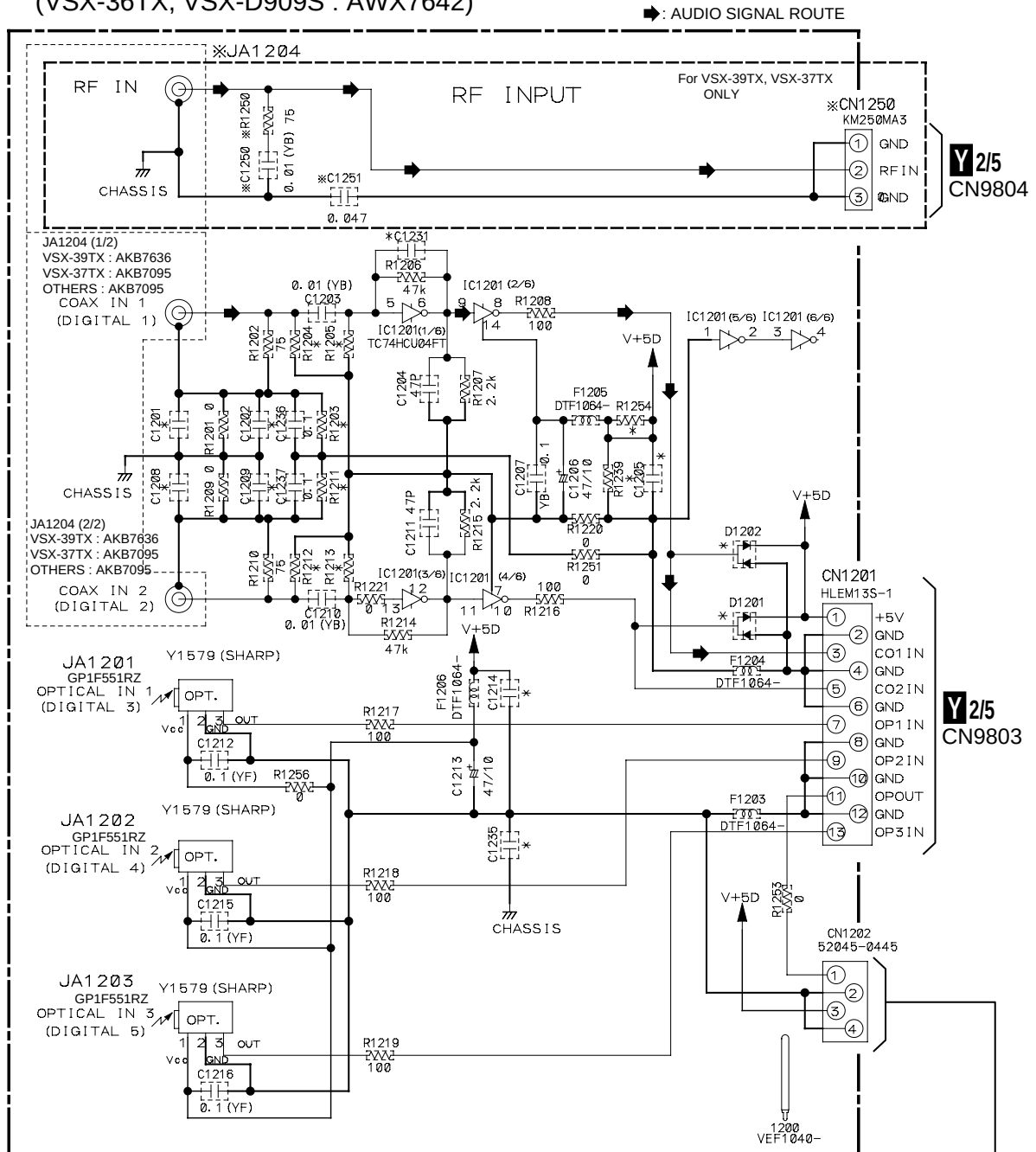
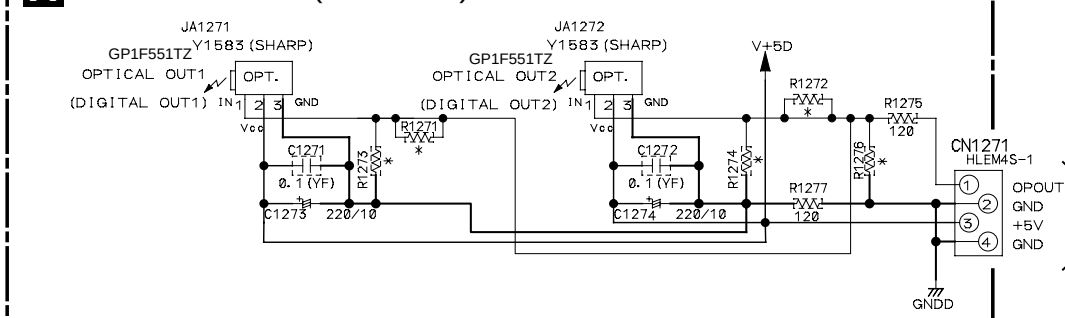


• NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.15 RF/DIGITAL INPUT and OPT OUT ASSYS

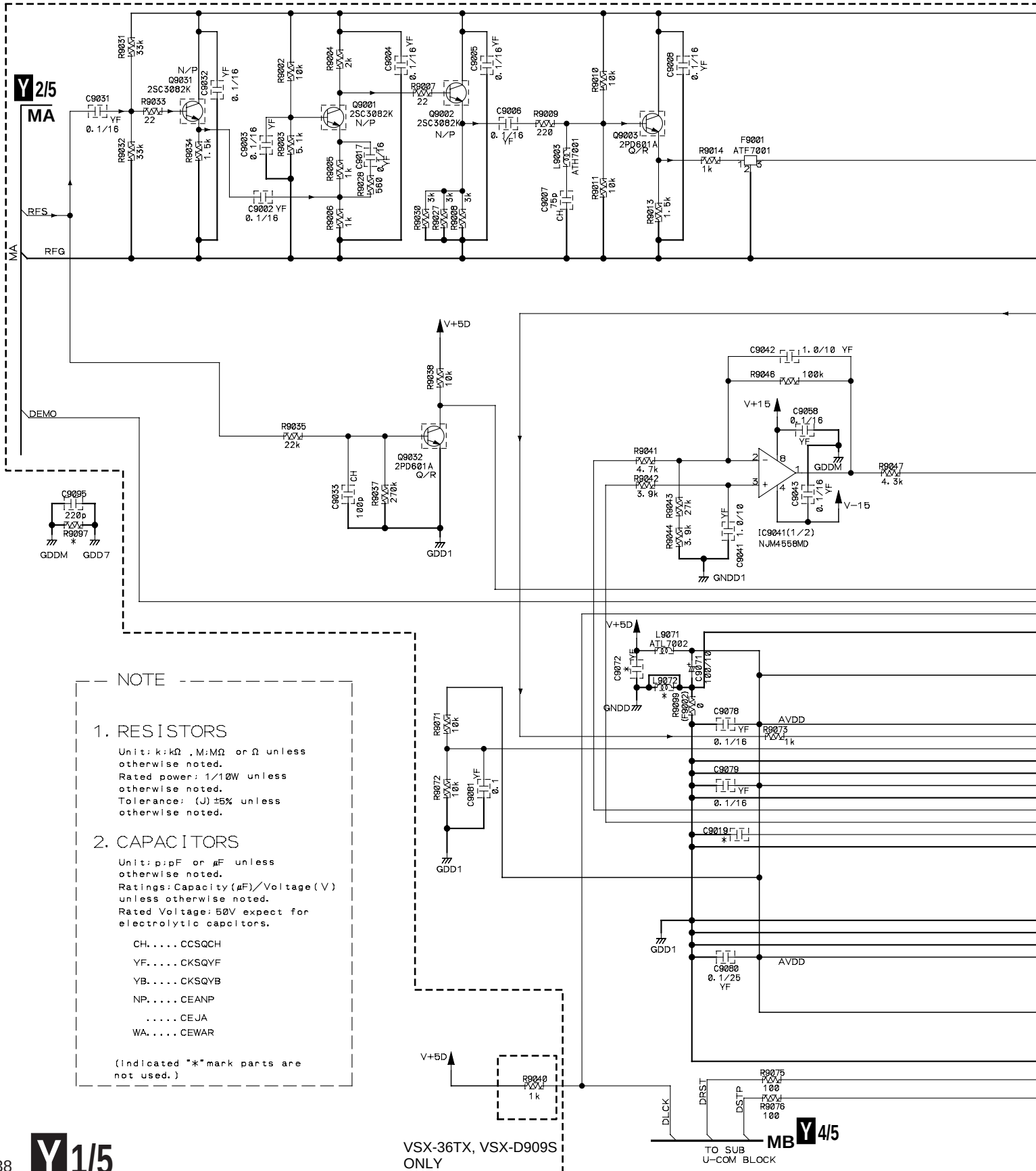
W RF / DIGITAL INPUT ASSY
 (VSX-39TX : AWX7637) (VSX-37TX : AWX7638)
 (VSX-36TX, VSX-D909S : AWX7642)

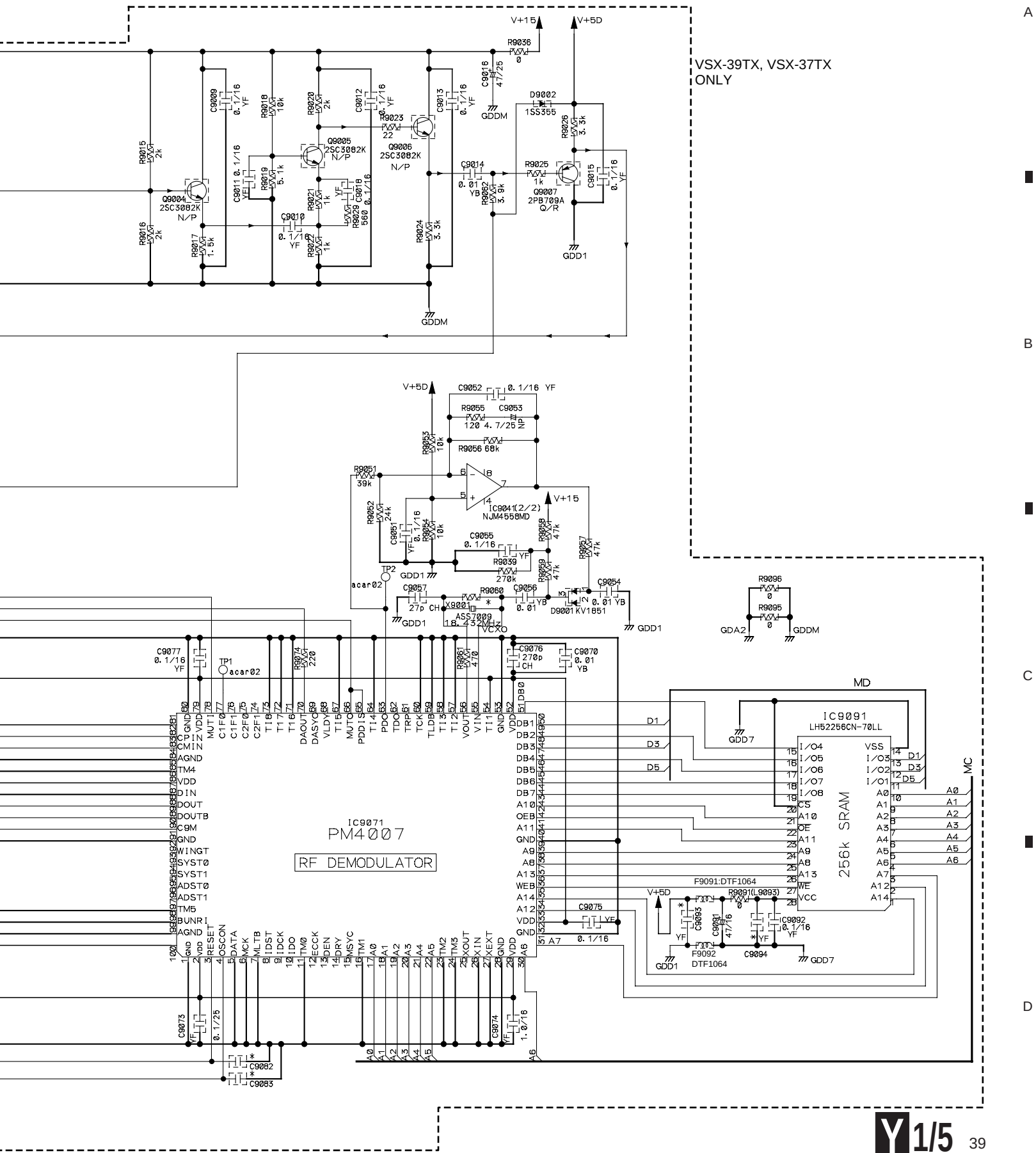
**X** OPT OUT ASSY (AWX7643)

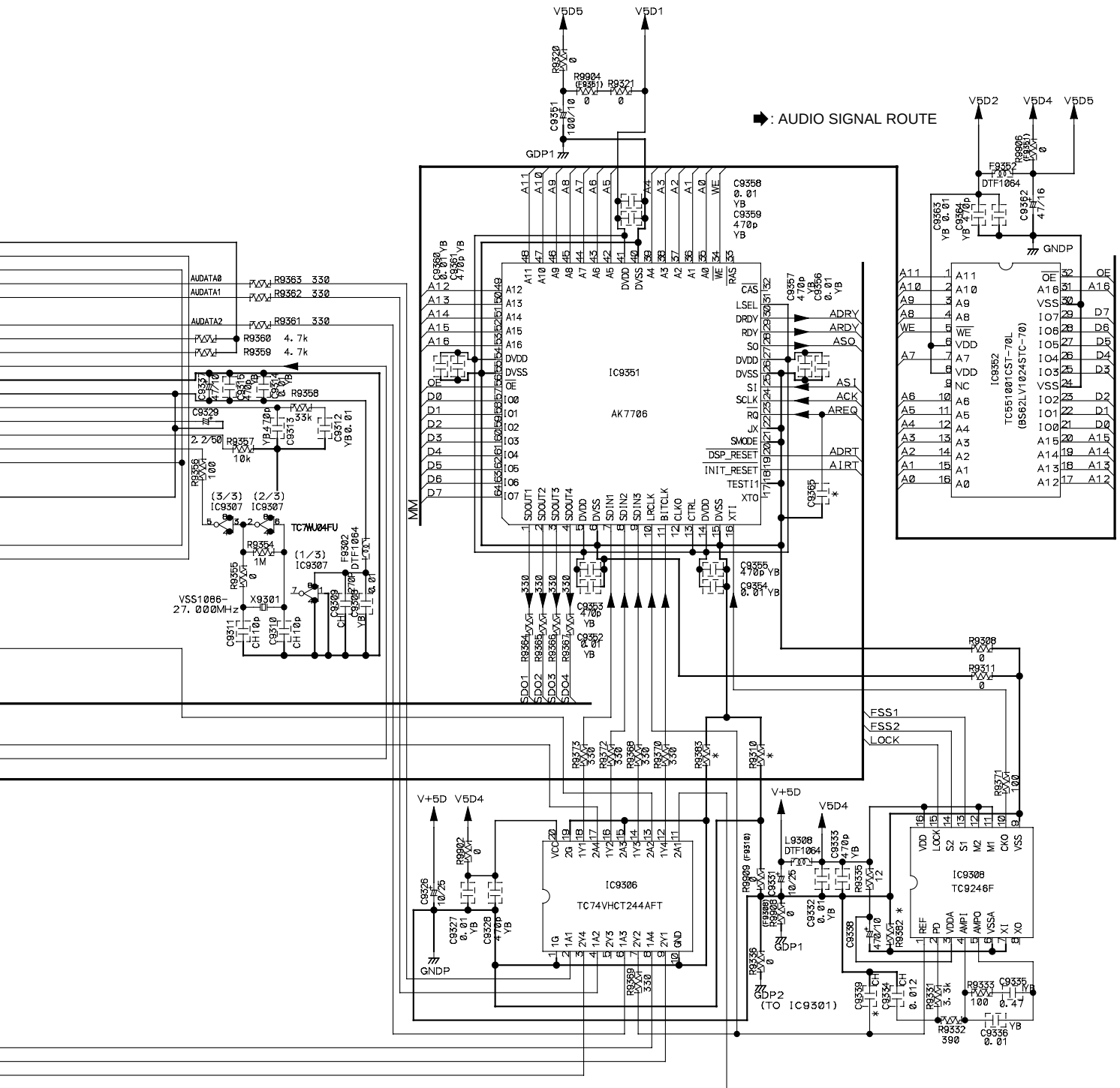
3.16 DSP ASSY (1/5)

Y 1/5 DSP ASSY
(VSX-39TX, VSX-37TX : AWX7632)
(VSX-36TX, VSX-D909S : AWX7633)

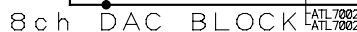
RF AMP





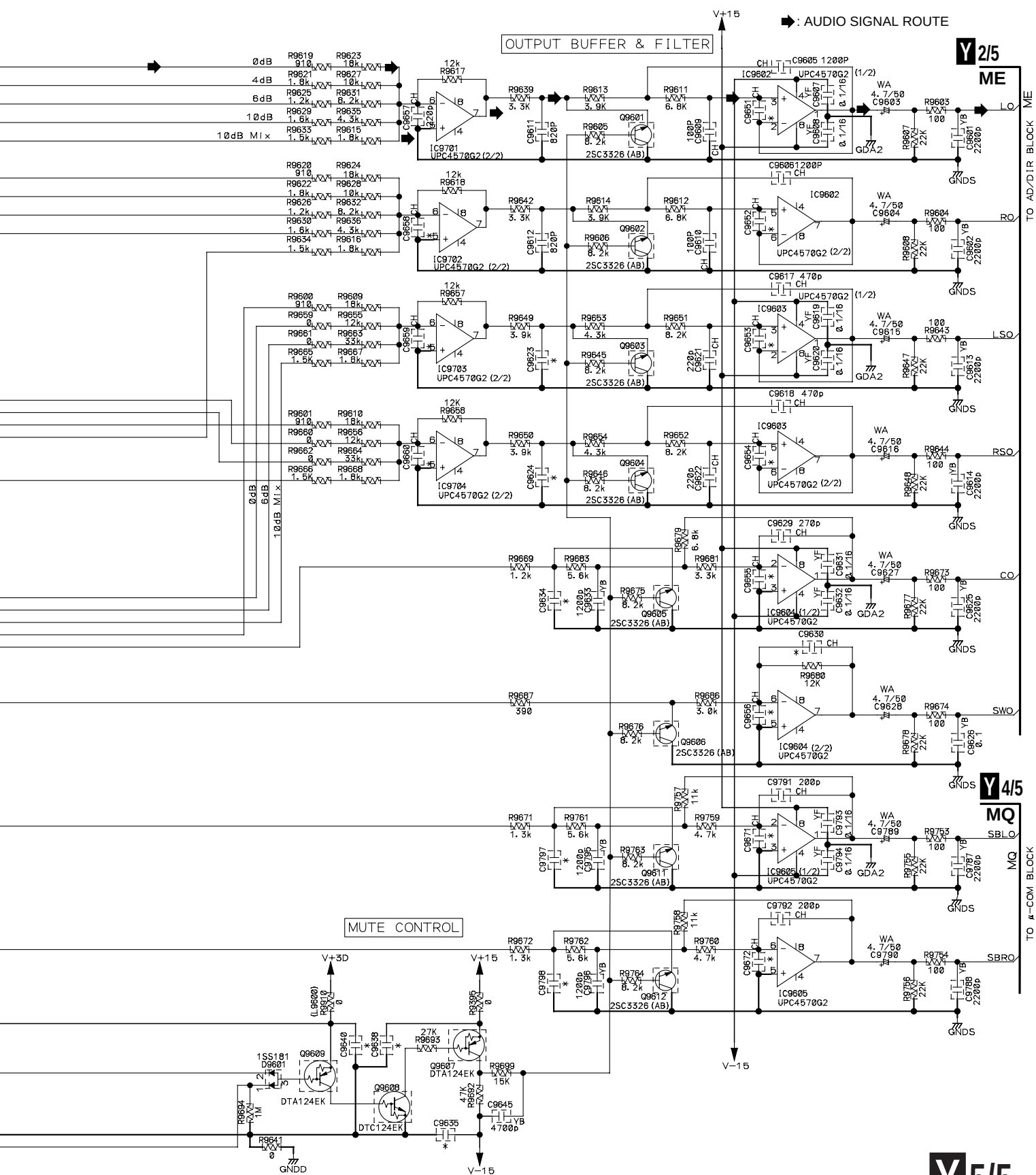


D

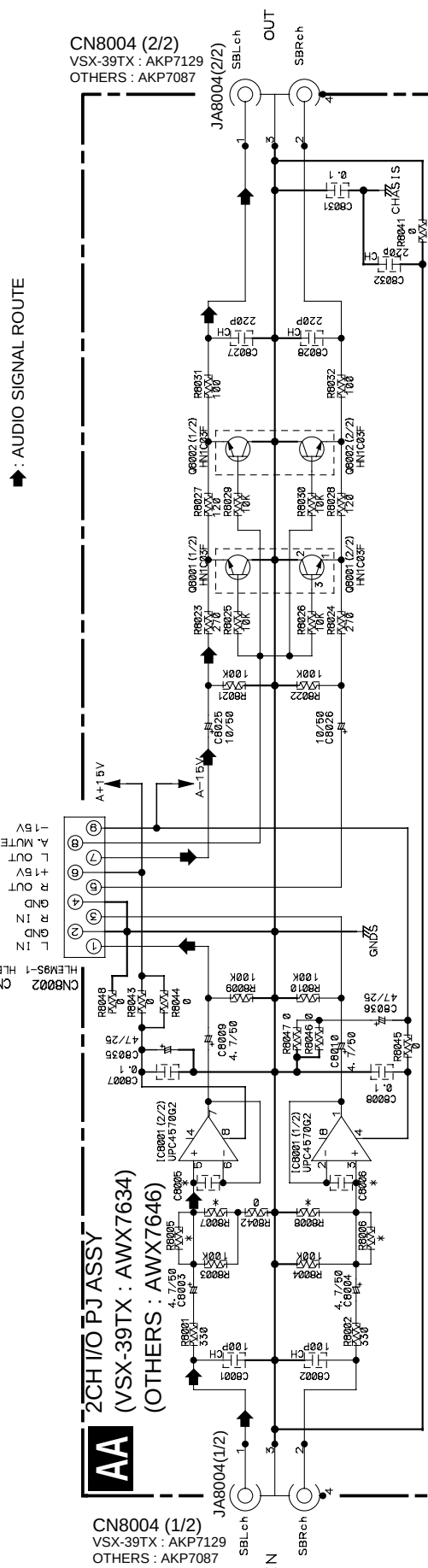
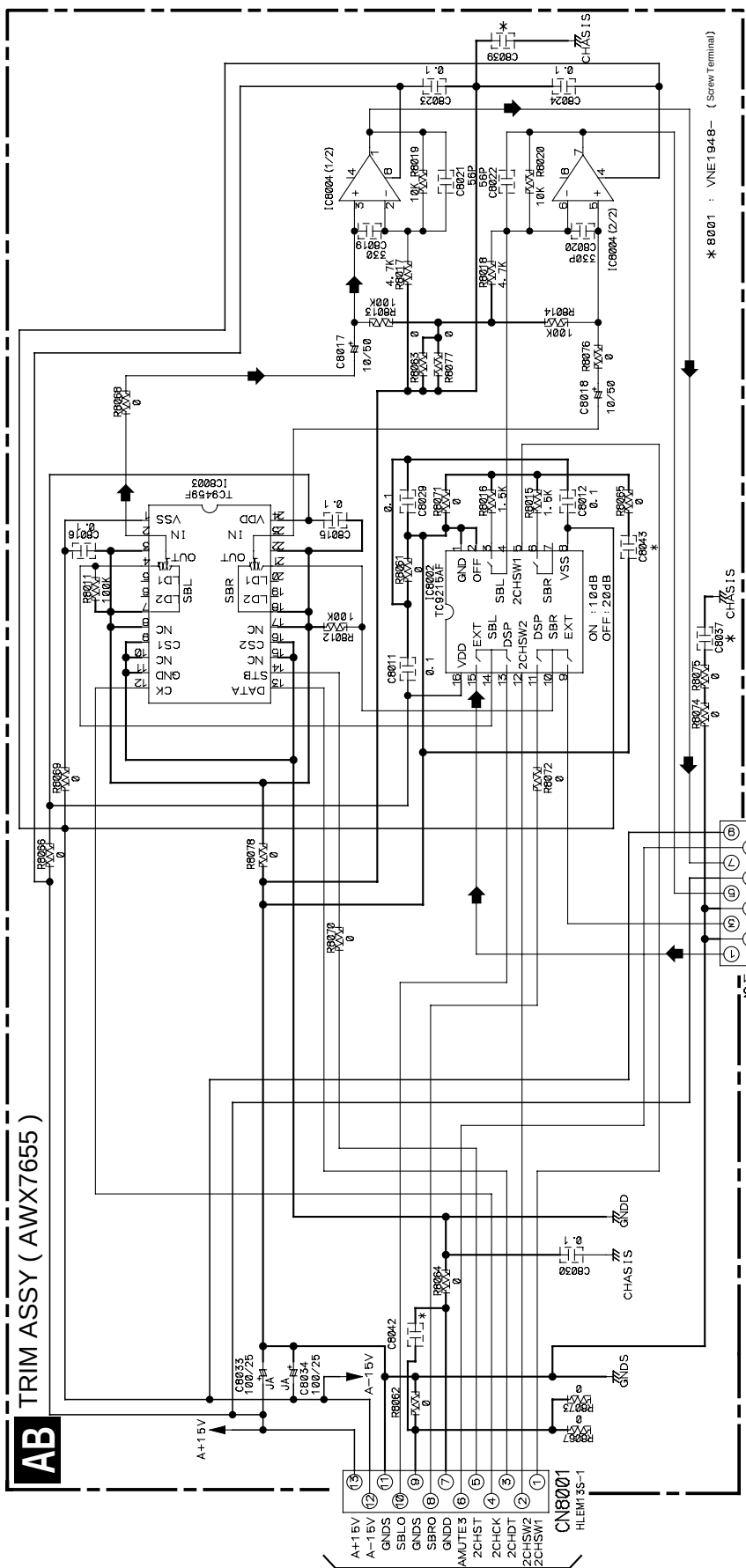


45

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

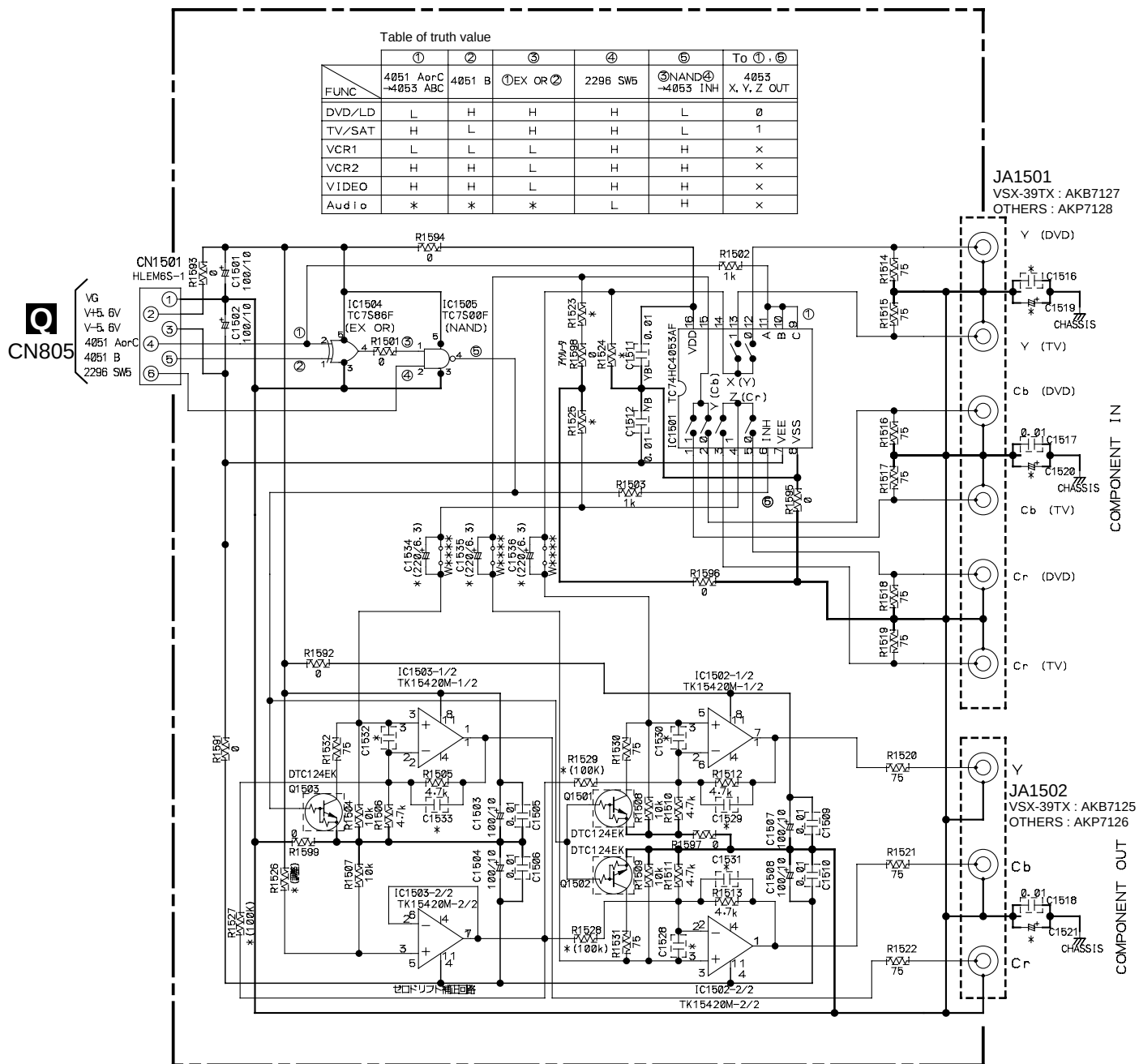


3.21 2CH I/O PJ and TRIM ASSYS



3.22 COMPONENT ASSY

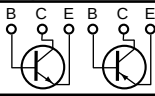
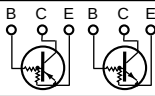
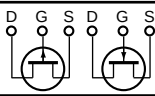
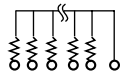
Z COMPONENT ASSY
(VSX-39TX : AWX7635)
(VSX-37TX, VSX-36TX, VSX-D909S : AWX7636)



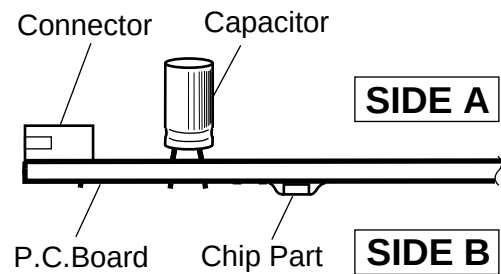
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

- 1. Part numbers in PCB diagrams match those in the schematic diagrams.
- 2. A comparison between the main parts of PCB and schematic diagrams is shown below.

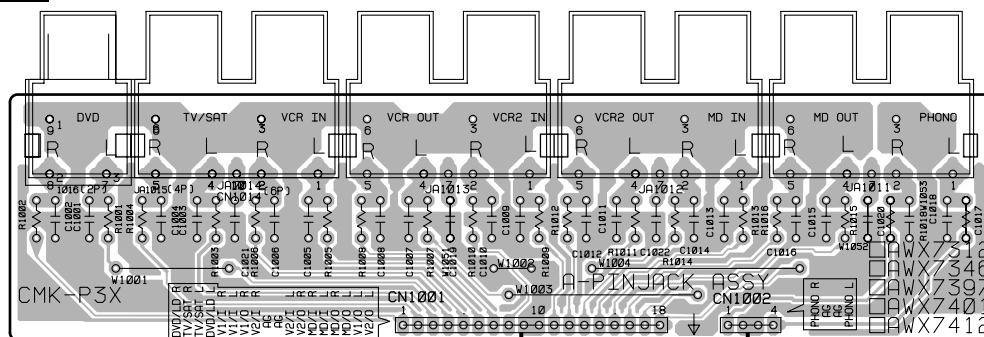
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

- 3. The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.
- 4. View point of PCB diagrams.

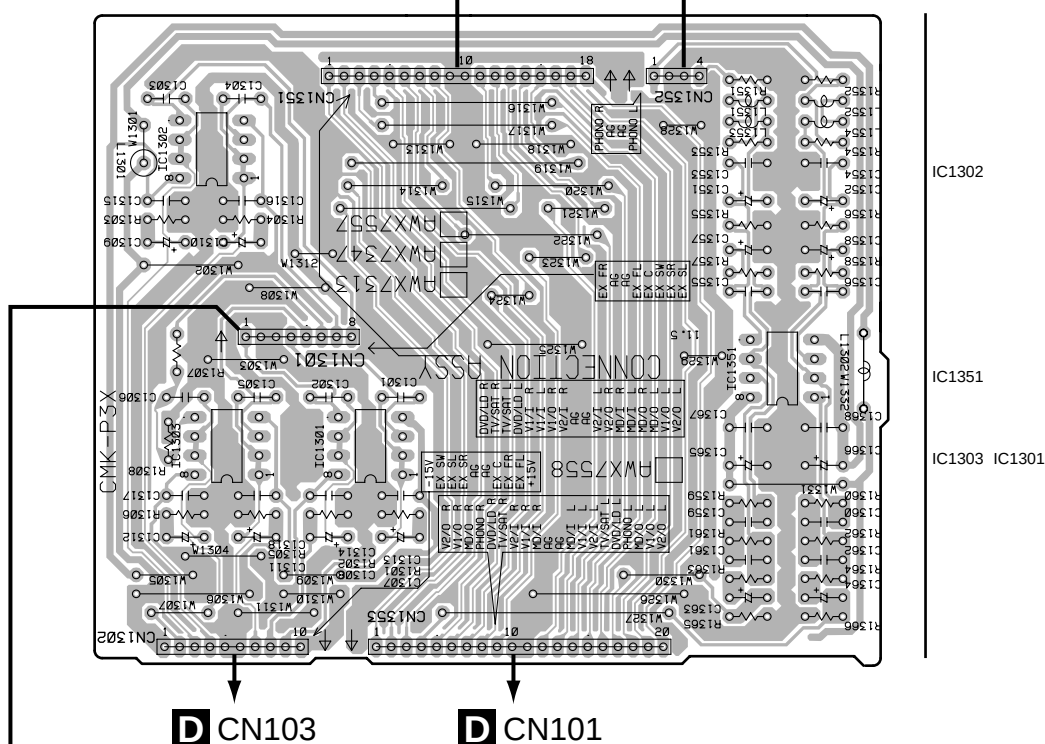


4.1 EXTRA-5.1 (EXTERNAL IN), A-PINJACK and CONNECTION ASSYS

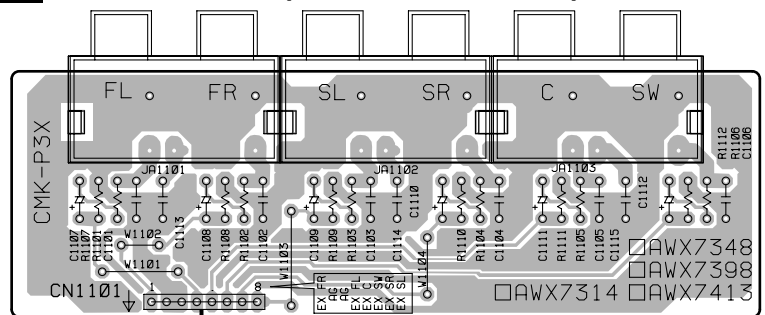
B A-PINJACK ASSY



C CONNECTION
ASSY



A EXTRA-5.1 (EXTERNAL IN) ASSY



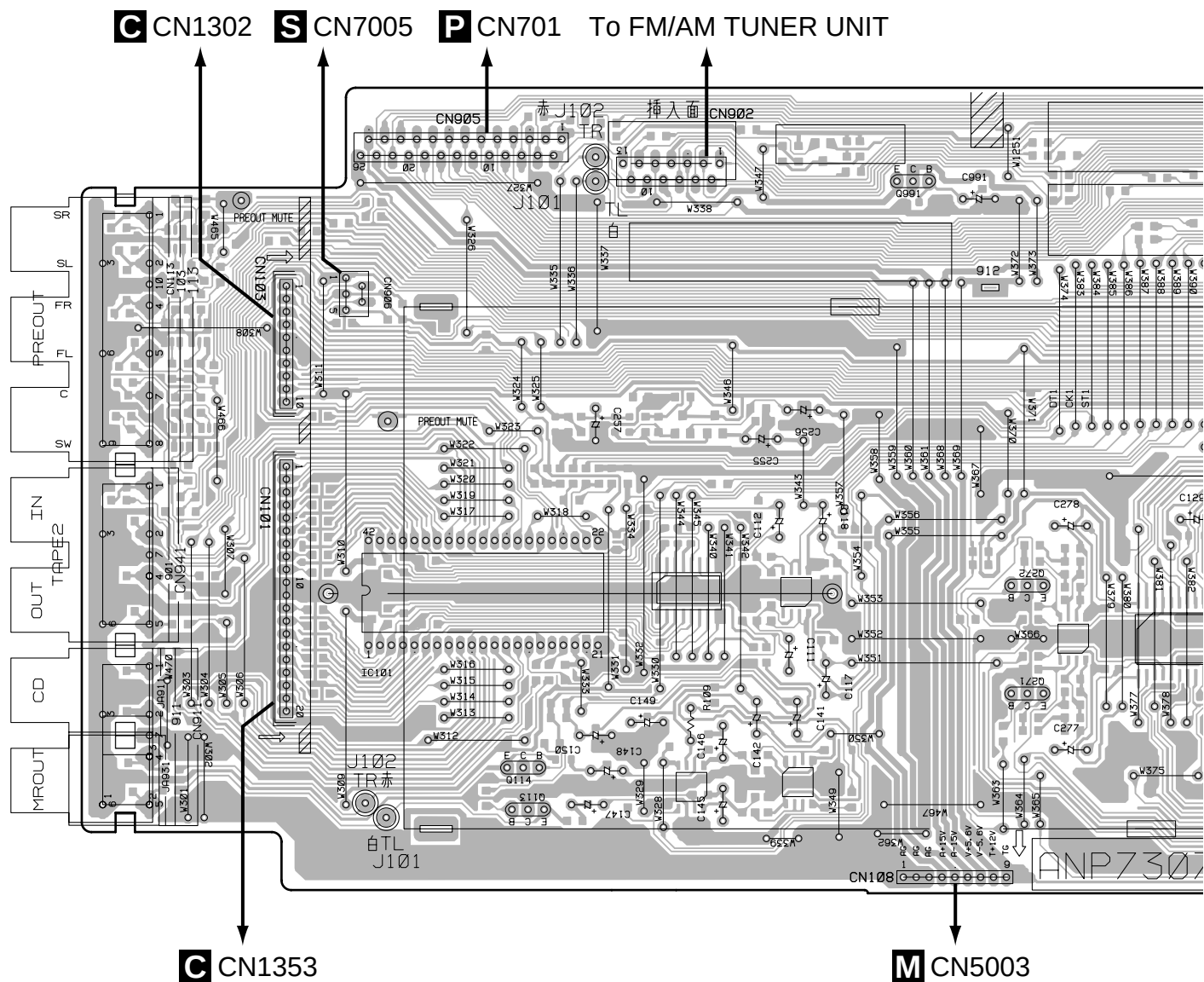
(ANP7308-F)

SIDE A

A B C

4.2 MAIN CONTROL ASSY

■ MAIN CONTROL ASSY



IC101

Q114
Q113

Q991

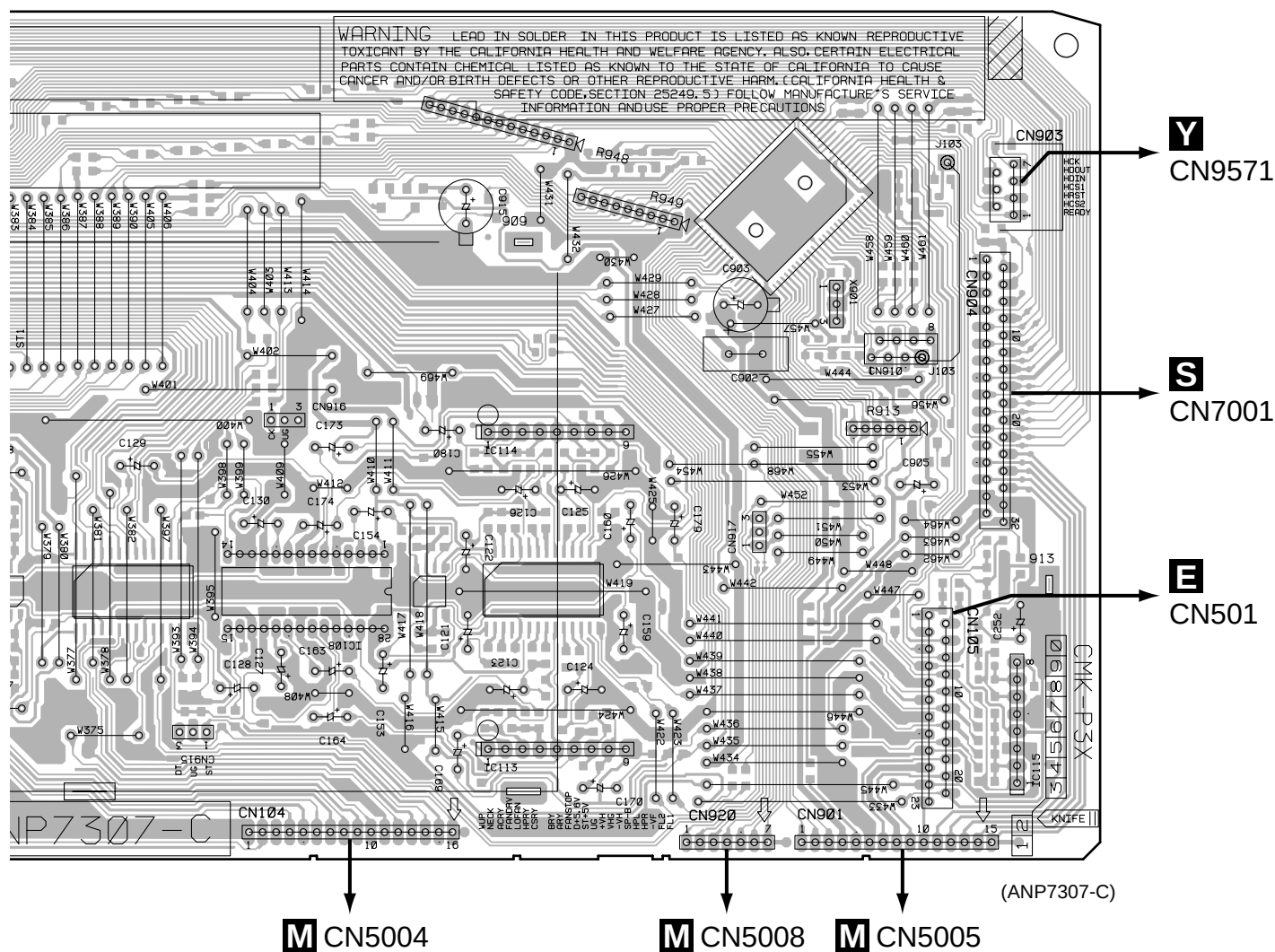
Q272

Q271

Q271

SIDE A

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

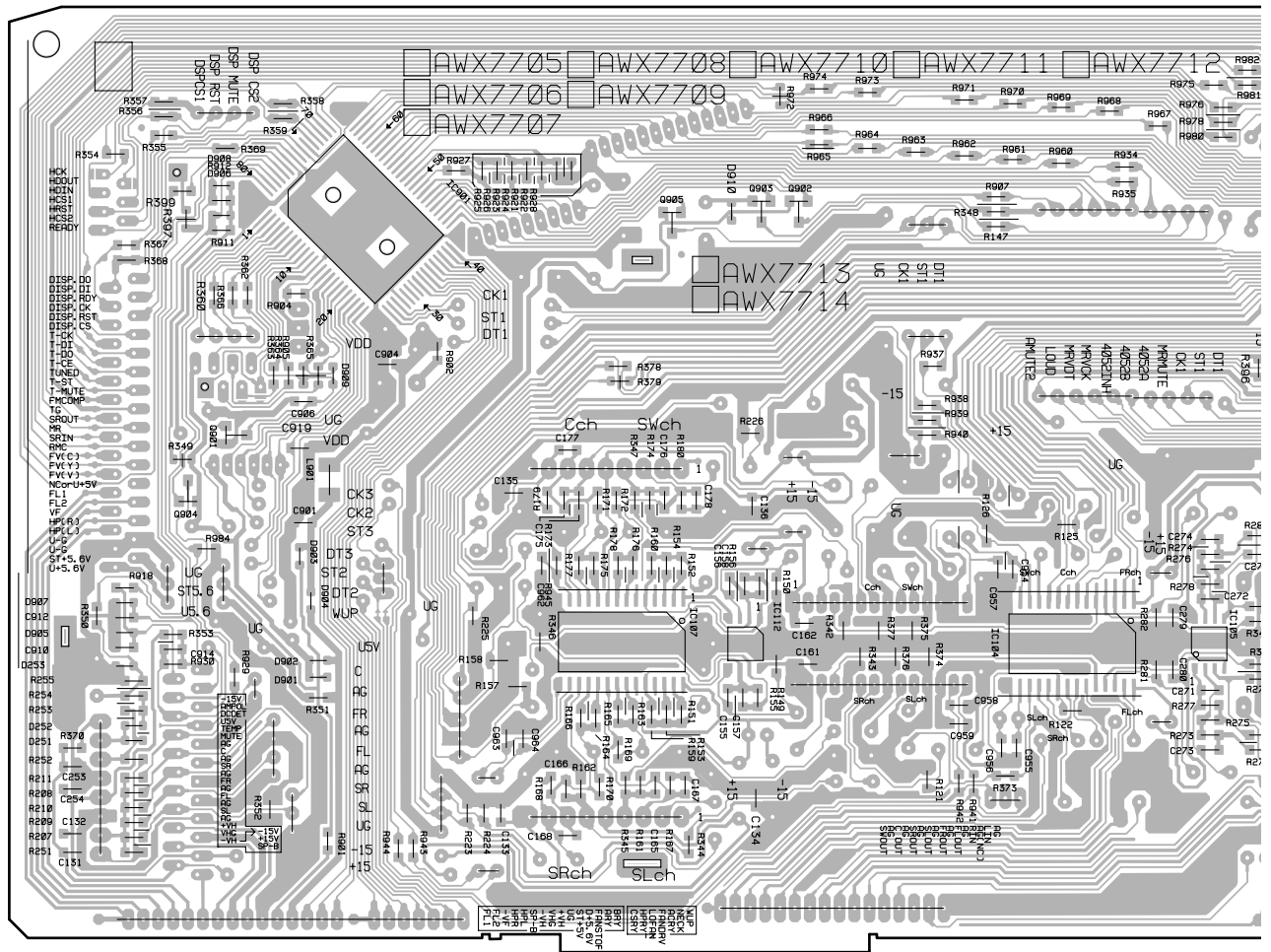
SIDE A

IC108

IC114
IC113

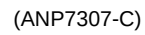
IC115

D MAIN CONTROL ASSY



Q904 Q901 IC901 Q905 Q903 Q902 IC104 IC105
IC107 IC112

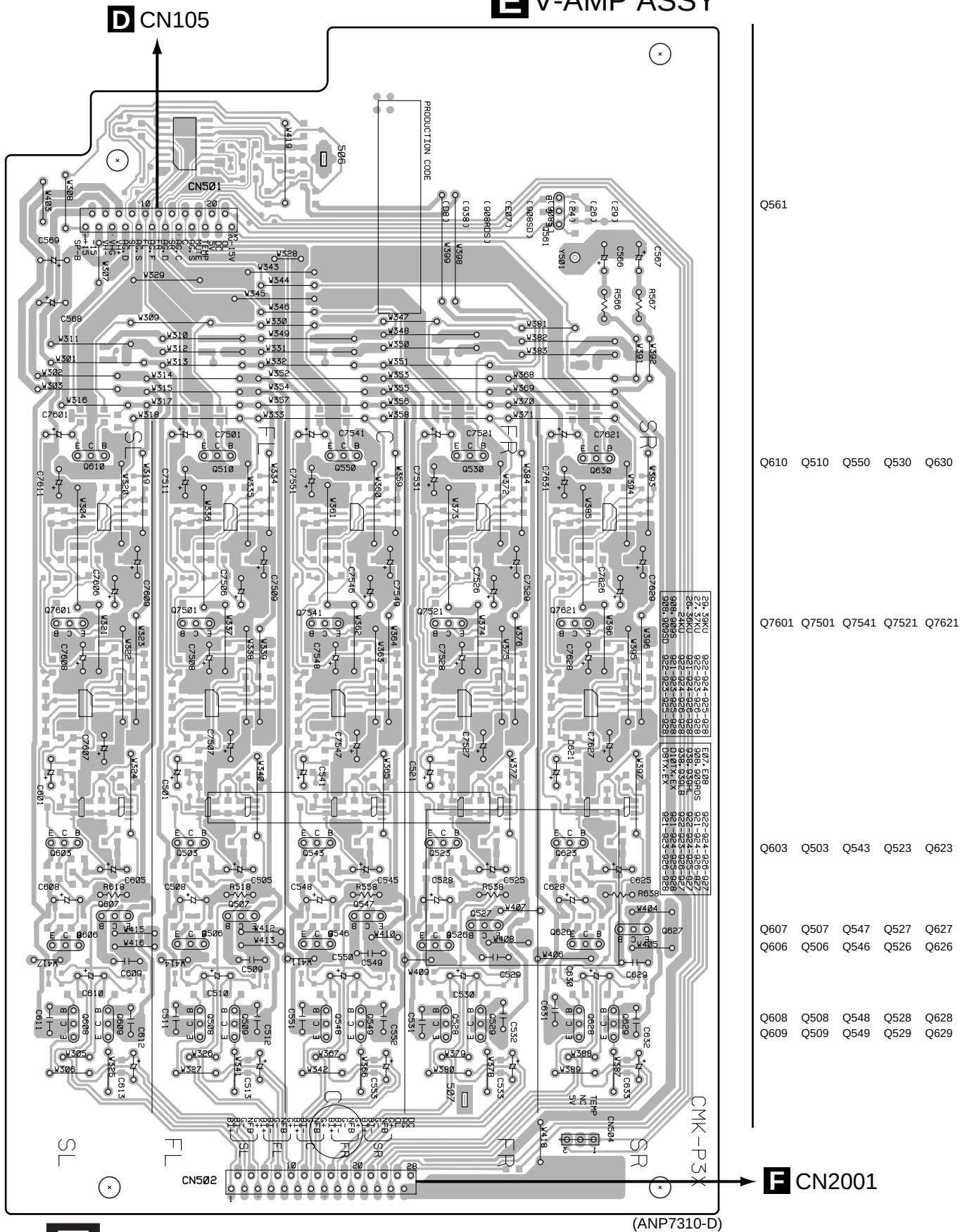
SIDE B



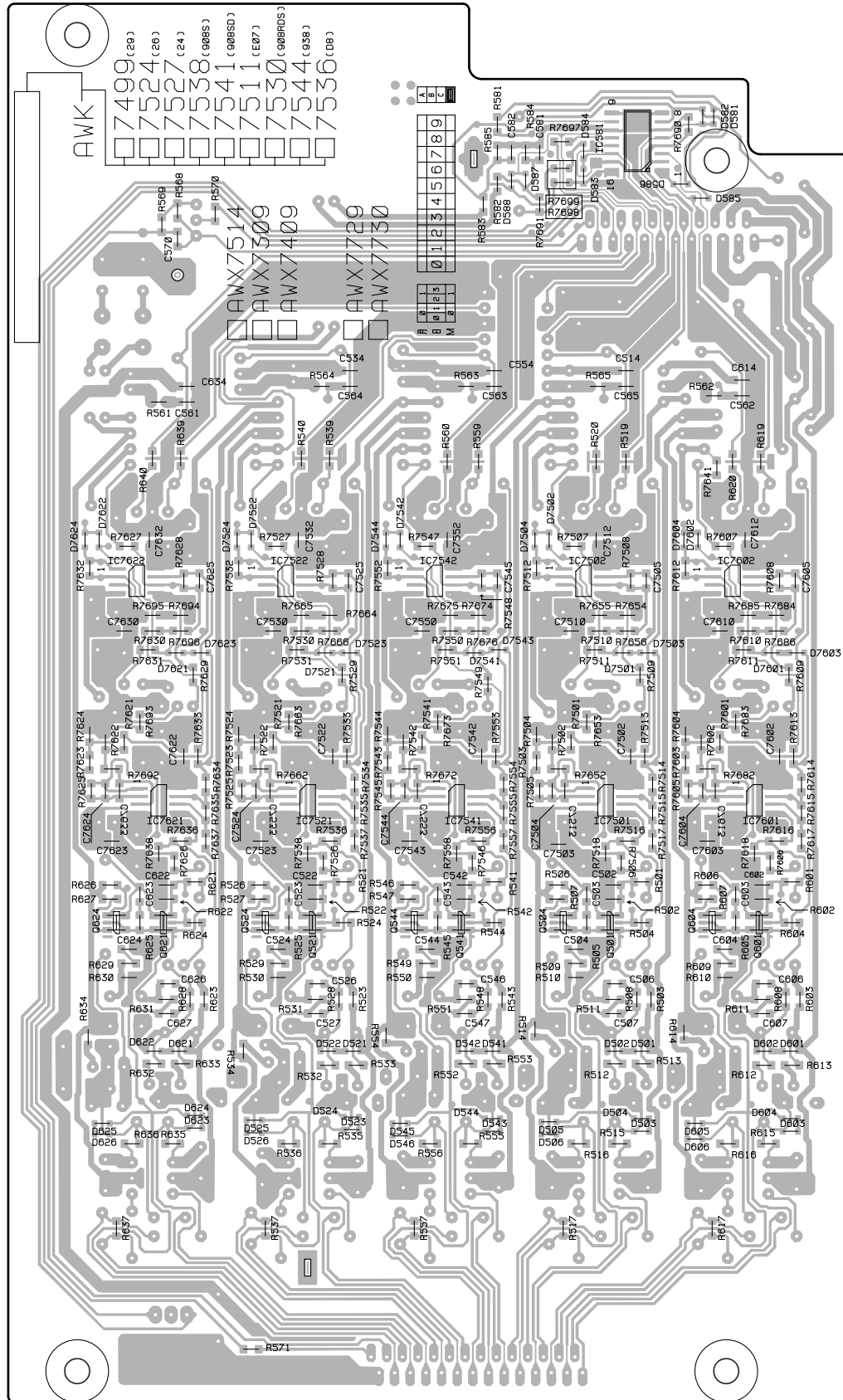
Q109	Q110
Q107	Q108
Q111	Q112

4.3 V-AMP ASSY

E V-AMP ASSY



V-AMP ASSY

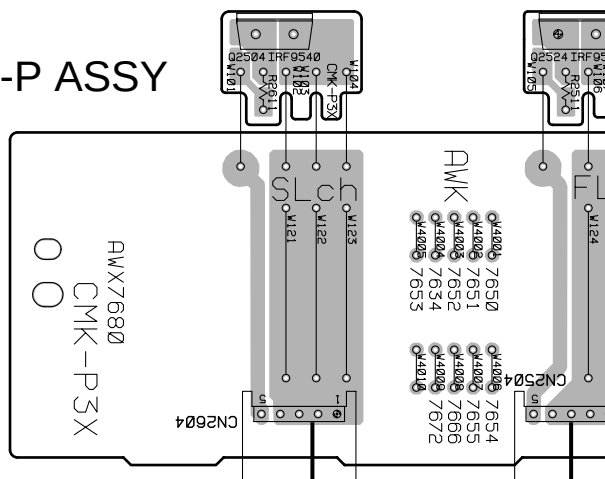


(ANP7310-F)

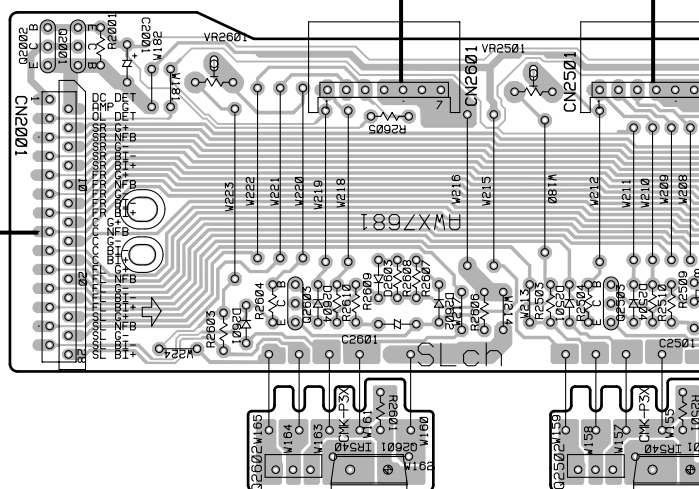
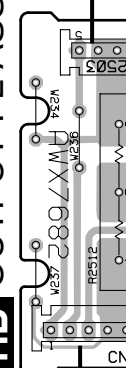
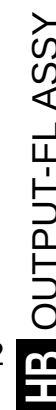
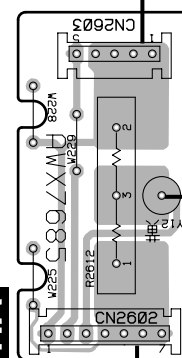
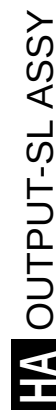
SIDE B



A



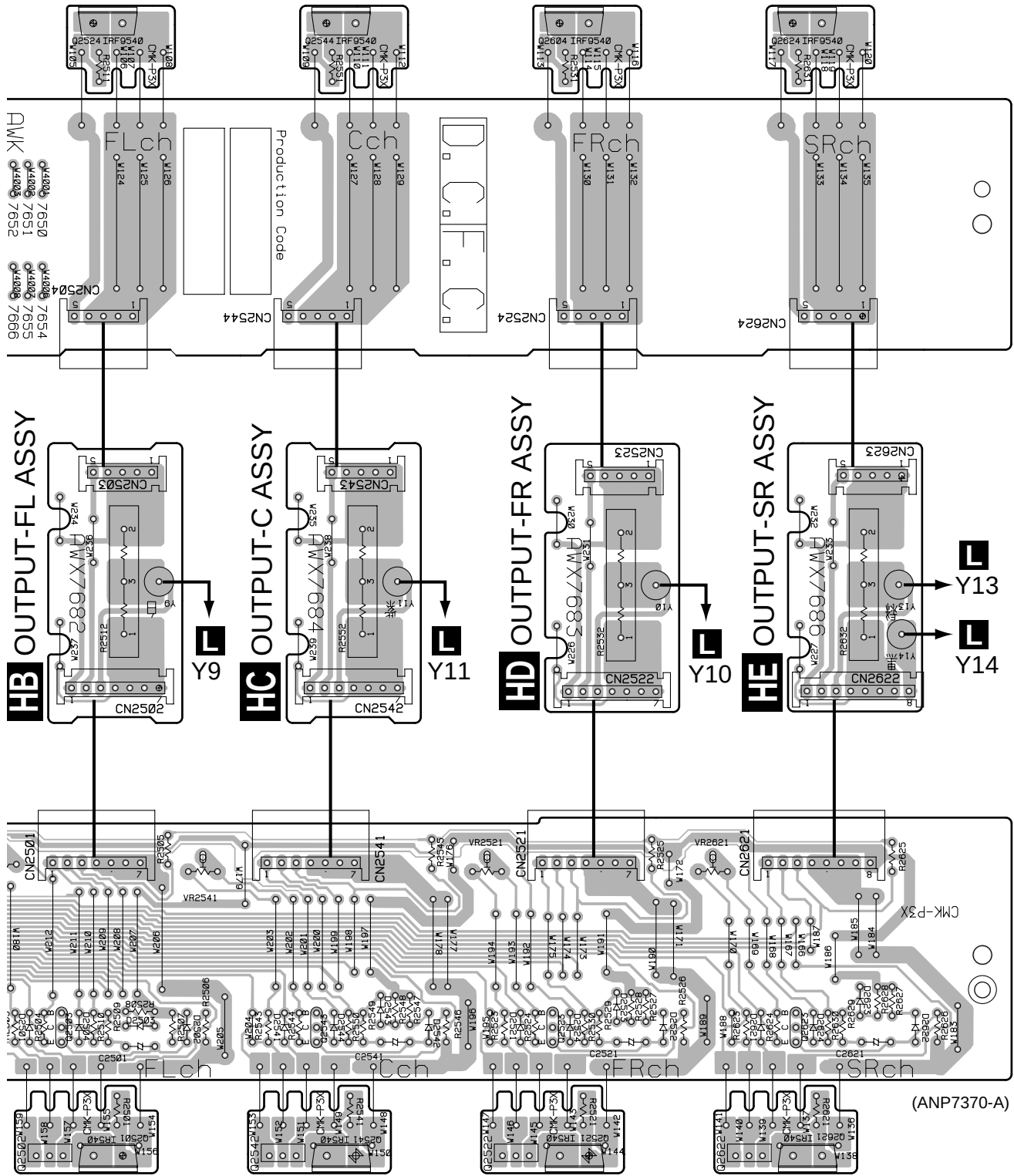
C



VR2501

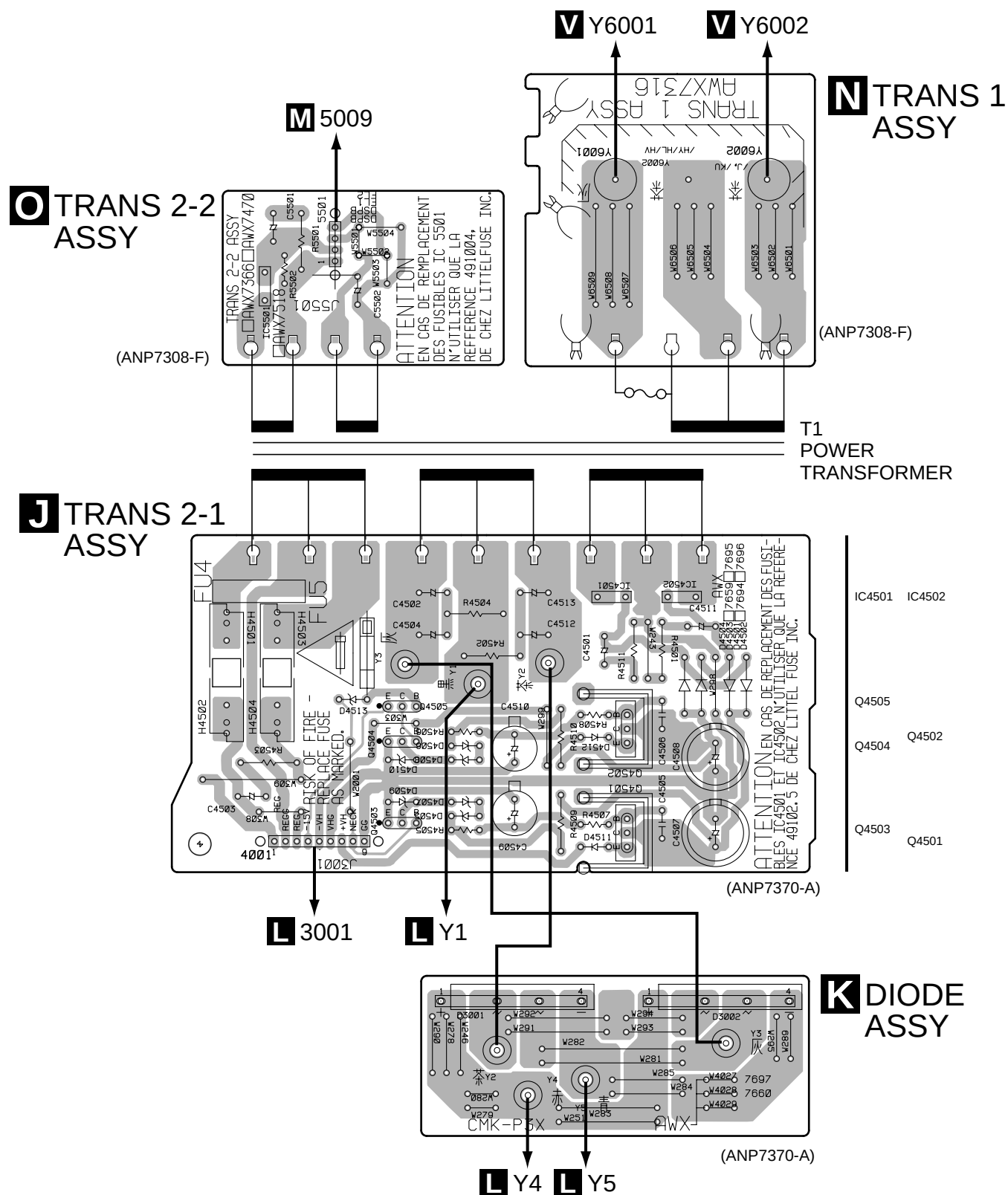
Q2503
Q2502

SIDE A

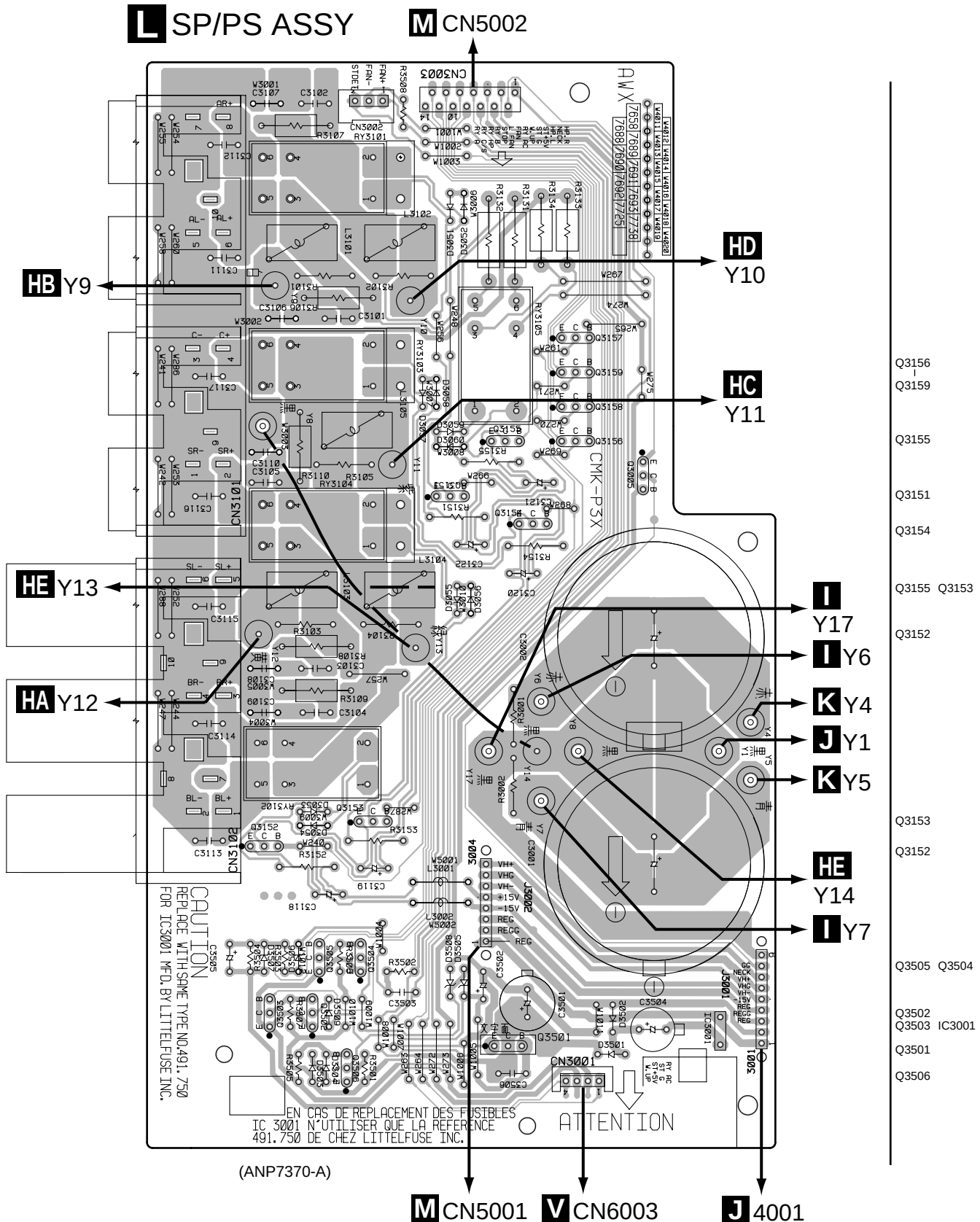


Q2503	Q2543	Q2523	Q2623
Q2502	Q2542	Q2522	Q2622

4.5 TRANS 2-1, DIODE, TRANS 1 and TRANS 2-2 ASSYS



4.6 SP/PS ASSY



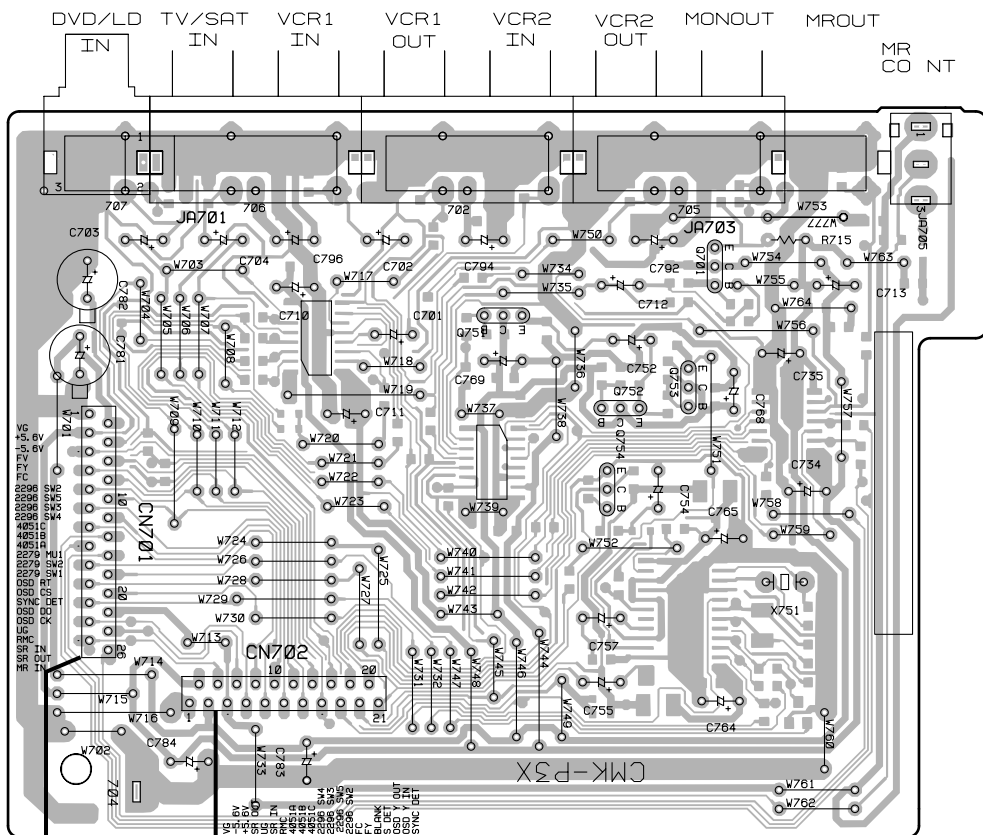
4.7 REGULATOR and PRIMARY ASSYS



4.8 VIDEO ASSY

P VIDEO ASSY

A



Q701
Q751
Q753
Q752
Q754

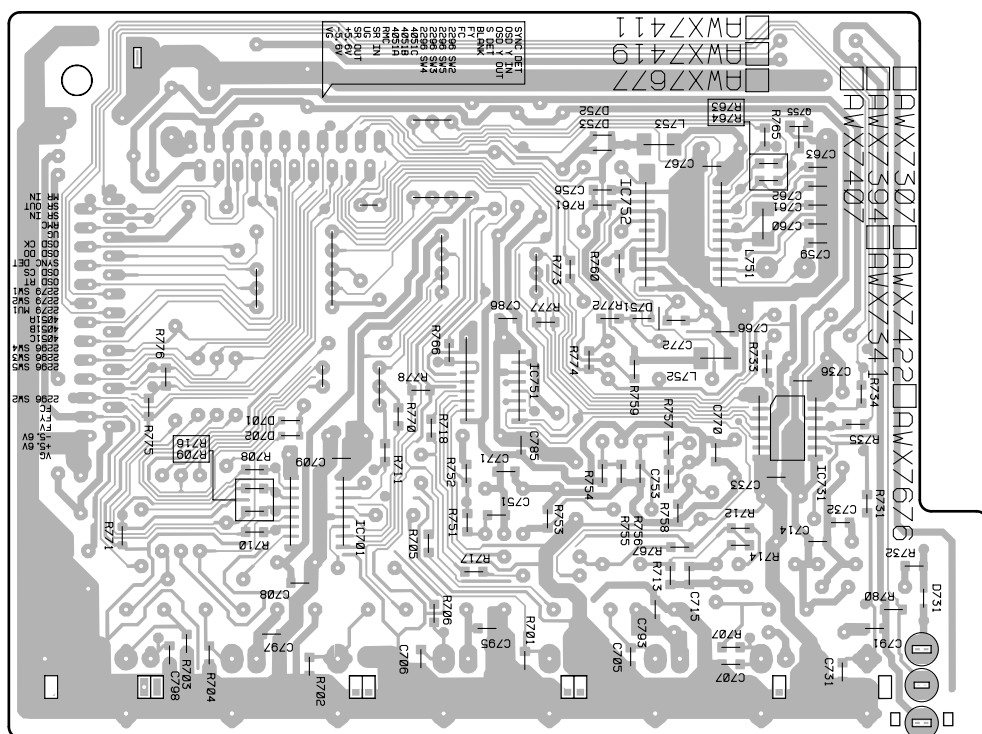
B

SIDE A

D CN905 Q CN804

P VIDEO ASSY

C



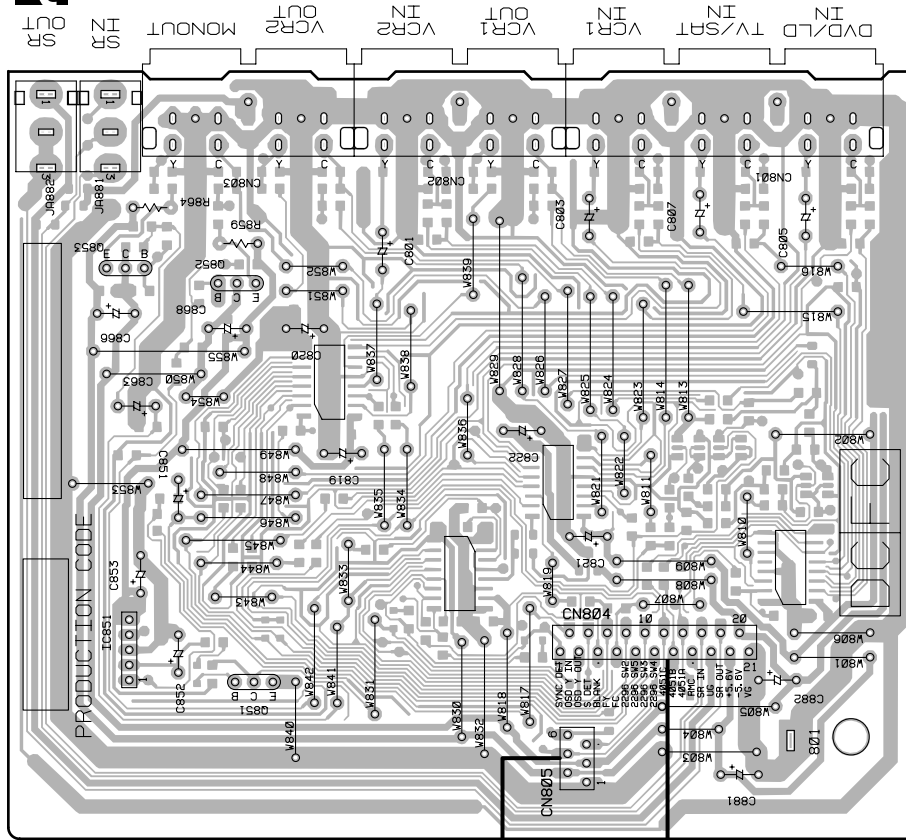
Q755
IC752
IC751
IC731
IC701

D

SIDE B

4.9 S-VIDEO ASSY

S-VIDEO ASSY



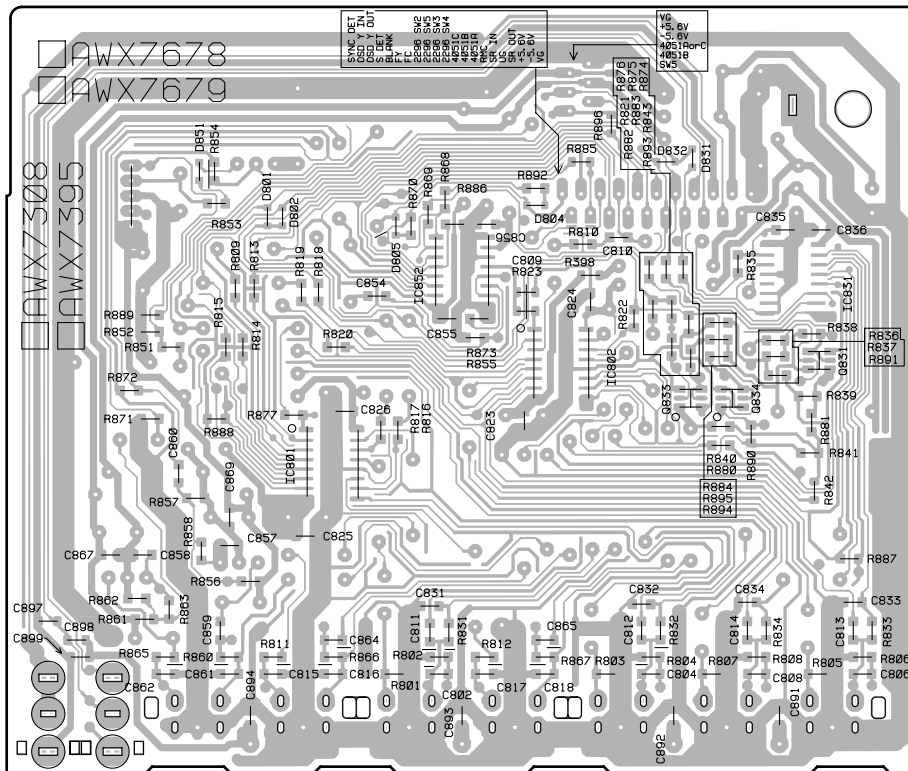
Q853 Q852

IC851 Q851

SIDE A

Z CN1501 **P** CN702

S-VIDEO ASSY



IC852 IC831

IC802 Q831

Q833 Q834

IC801

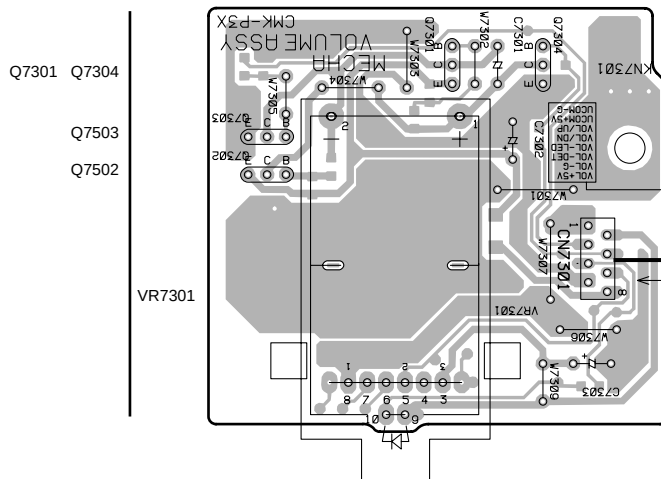
SIDE B

(ANP7307-C)

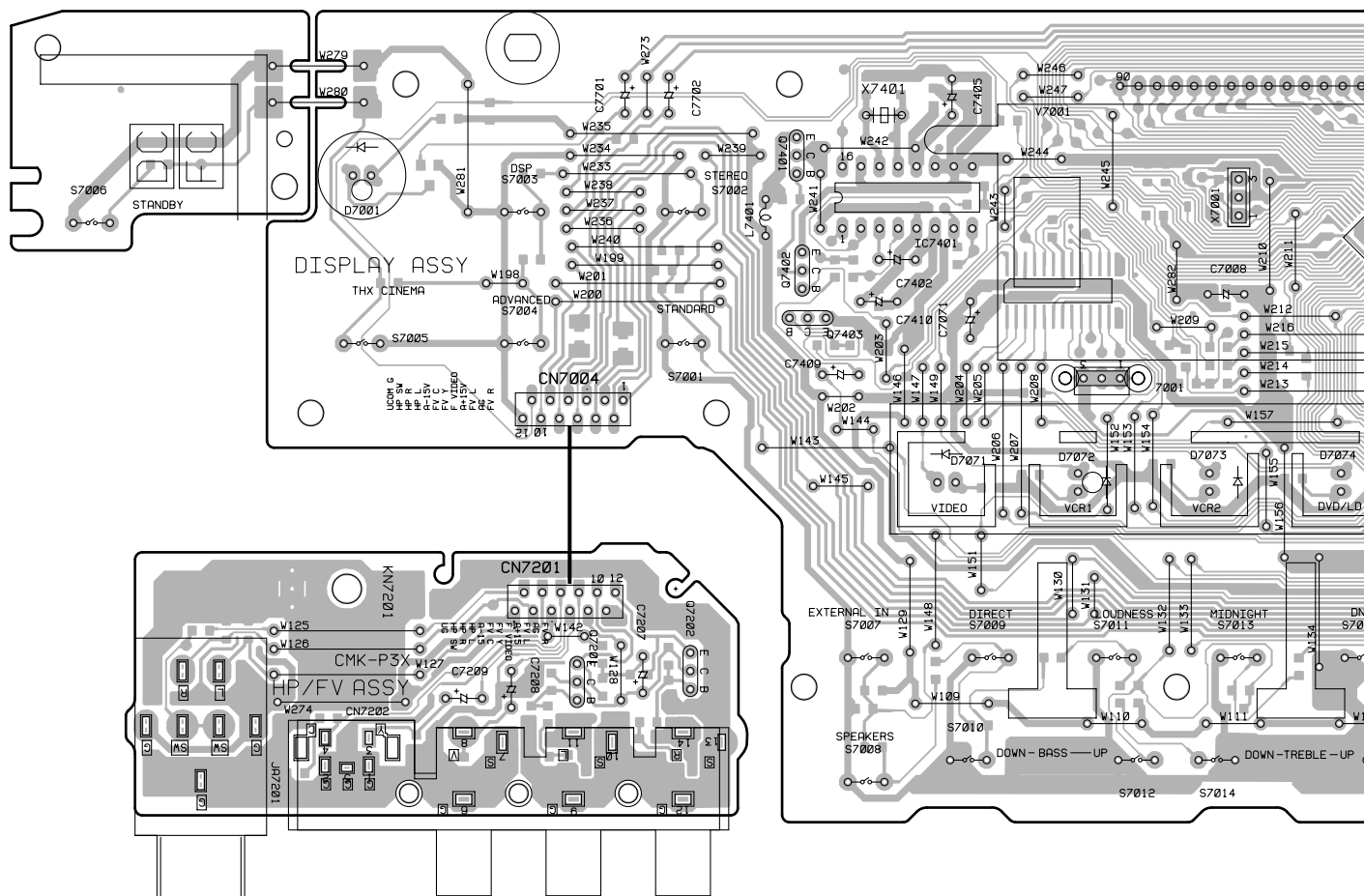


4.10 H. PHONE/F. VIDEO, DISPLAY, ROTARY ENCODER and VOLUME ASSYS

U VOLUME ASSY



S DISPLAY ASSY



R H. PHONE/F. VIDEO ASSY

Q7201	Q7202
-------	-------

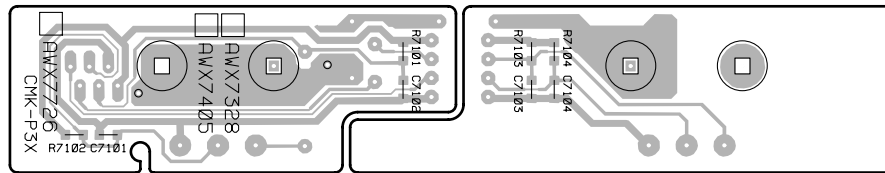
Q7401	IC7401
Q7403	

B

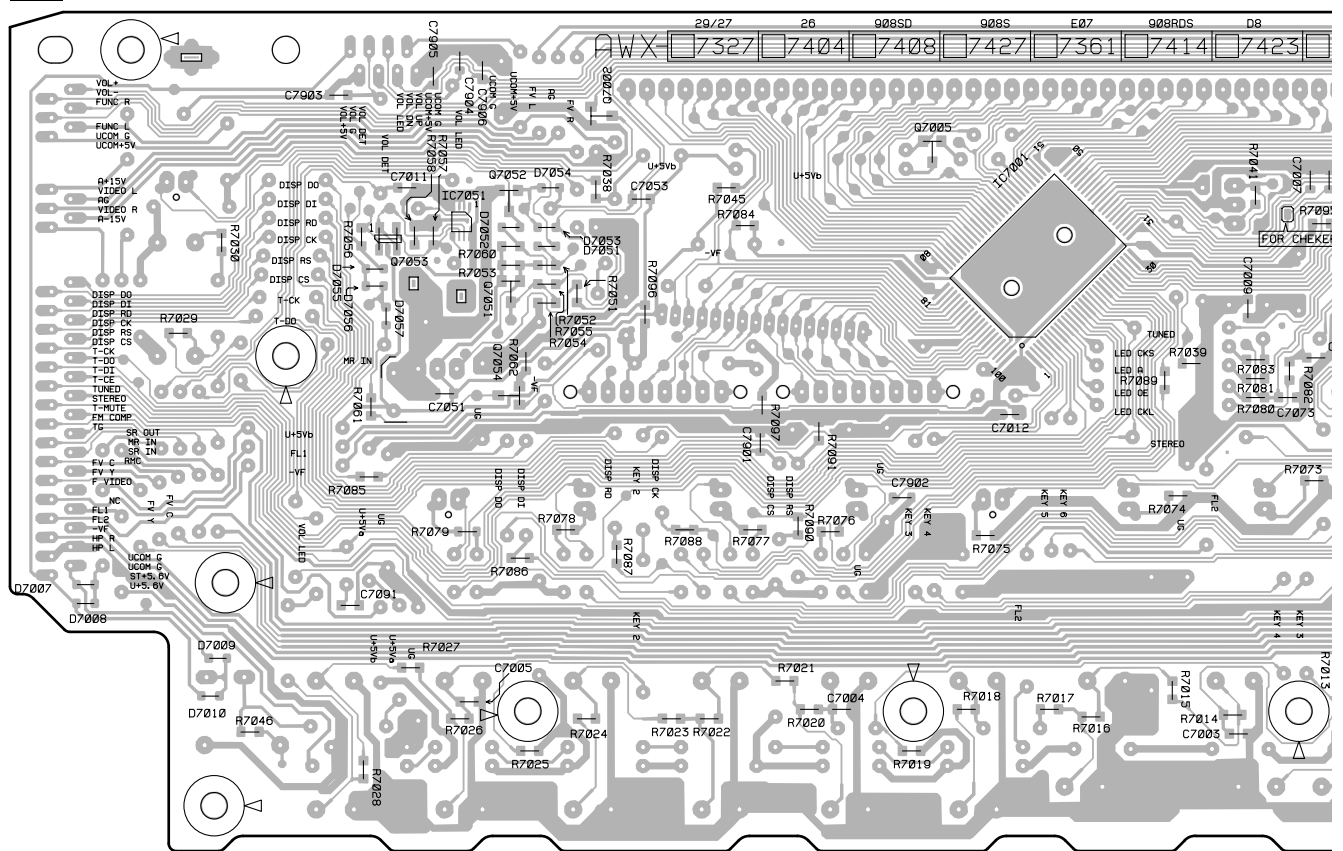


SIDE A

T ROTARY ENCODER ASSY



S DISPLAY ASSY



Q7053

IC7051

Q7051 Q7054

Q7005

IC7001

4.11 DSP ASSY

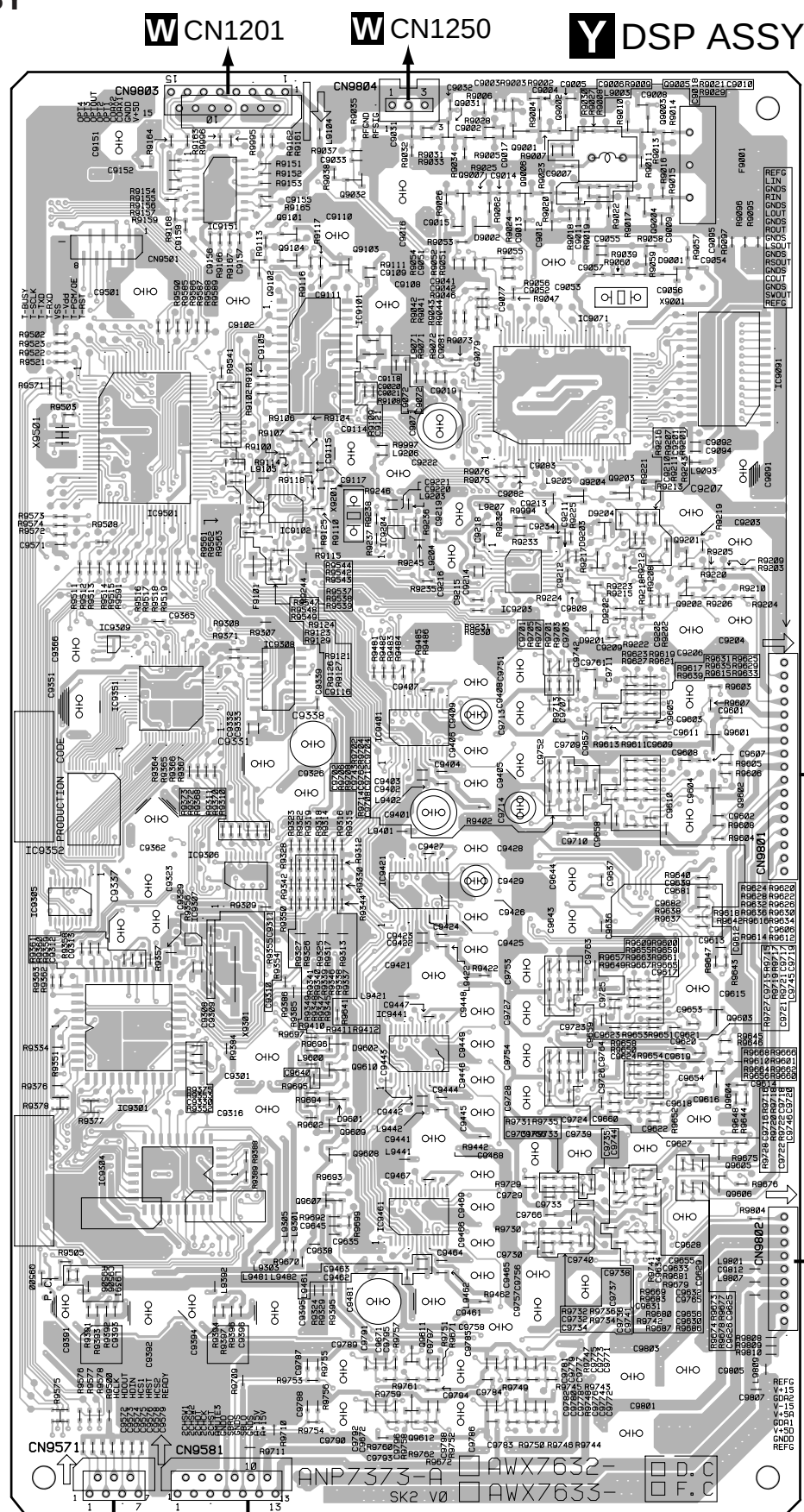
A

B

C

D

- Q9001-Q9003
- IC9151 Q9032
- Q9004-Q9007
- Q9101-Q9104
- IC9071 IC9091
- IC9101
- Q9202-Q9204
- IC9501 IC9102
- IC9204
- Q9201
- IC9203
- IC9103
- IC9309
- IC9308
- IC9351
- IC9401 IC9601
- IC9321
- Q9602
- IC9352
- IC9306
- IC9305 IC9421
- IC9307
- Q9603
- IC9301
- IC9441
- Q9610 Q9604
- Q9609 Q9605
- Q9608
- IC9304
- Q9607 Q9606
- IC9461
- Q9500
- Q9611
- Q9612



D CN903 **AB** CN8001

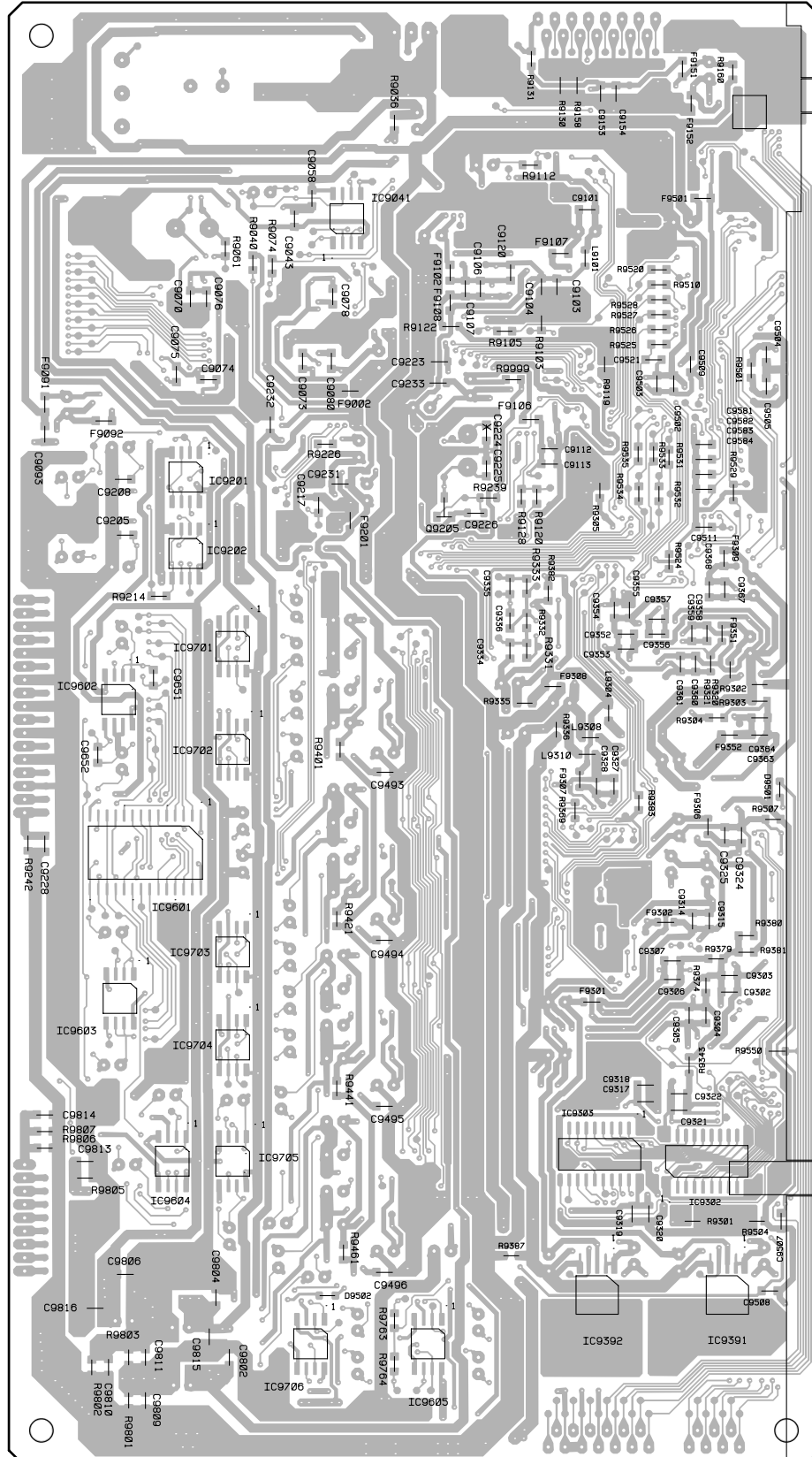
SIDE A

(ANP7373-A)



Y DSP ASSY

IC9041
IC9201
Q9205
IC9202
IC9701
IC9602
IC9702
IC9601
IC9703
IC9603
IC9704
IC9604
IC9705
IC9303
IC9302
IC9392
IC9391
IC9706
IC9605



(ANP7373-A)

5. PCB PARTS LIST

NOTES: ● The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

$560\ \Omega \rightarrow 56 \times 10^1 \rightarrow 561 \dots\dots\dots RD1/4PU \begin{array}{|c|c|c|} \hline 5 & 6 & 1 \\ \hline \end{array} J$
 $47k\ \Omega \rightarrow 47 \times 10^3 \rightarrow 473 \dots\dots\dots RD1/4PU \begin{array}{|c|c|c|} \hline 4 & 7 & 3 \\ \hline \end{array} J$
 $0.5\ \Omega \rightarrow R50 \dots\dots\dots RN2H \begin{array}{|c|c|c|} \hline R & 5 & 0 \\ \hline \end{array} K$
 $1\ \Omega \rightarrow 1R0 \dots\dots\dots RS1P \begin{array}{|c|c|c|} \hline 1 & R & 0 \\ \hline \end{array} K$

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\ \Omega \rightarrow 562 \times 10^1 \rightarrow 5621 \dots\dots\dots RN1/4PC \begin{array}{|c|c|c|c|c|} \hline 5 & 6 & 2 & 1 & \\ \hline \end{array} F$

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.				Remarks
		VSX-39TX	VSX-37TX	VSX-36TX	VSX-D909S	
NSP	MAIN ASSY	AWK7640	AWK7641	AWK7642	AWK7643	
	└ MAIN CONTROL ASSY	AWX7705	AWX7706	AWX7707	AWX7708	
	└ VIDEO ASSY	AWX7307	AWX7394	AWX7394	AWX7394	
	└ S-VIDEO ASSY	AWX7678	AWX7679	AWX7679	AWX7679	
NSP	COMPLEX ASSY	AWK7497	AWK7522	AWK7522	AWK7522	
	└ REGULATOR ASSY	AWX7310	AWX7310	AWX7310	AWX7310	
	└ PRIMARY ASSY	AWX7311	AWX7311	AWX7311	AWX7311	
NSP	└ A-PINJACK ASSY	AWX7312	AWX7397	AWX7397	AWX7397	
	└ CONNECTION ASSY	AWX7313	AWX7313	AWX7313	AWX7313	
NSP	└ EXTRA-5.1 ASSY	AWX7314	Not used	Not used	Not used	
	└ EXTERNAL IN ASSY	Not used	AWX7398	AWX7398	AWX7398	
NSP	└ TRANS 2-2 ASSY	AWX7366	AWX7366	AWX7366	AWX7366	
	└ TRANS 1 ASSY	AWX7316	AWX7316	AWX7316	AWX7316	
NSP	COMPLEX 2 ASSY	AWK7626	AWK7627	AWK7628	AWK7628	
	└ COMPONENT ASSY	AWX7635	AWX7636	AWX7636	AWX7636	
	└ RF / DIGITAL IN ASSY	AWX7637	AWX7638	AWX7642	AWX7642	
NSP	└ OPT OUT ASSY	AWX7643	AWX7643	AWX7643	AWX7643	
NSP	2CH I/O ASSY	AWK7636	AWX7637	AWX7637	AWX7637	
	└ 2CH I/O PJ ASSY	AWX7634	AWX7646	AWX7646	AWX7646	
	└ TRIM ASSY	AWX7655	AWX7655	AWX7655	AWX7655	
NSP	FRONT/VAMP ASSY	AWK7667	AWK7656	AWK7657	AWK7658	
	└ V-AMP ASSY	AWX7729	AWX7309	AWX7309	AWX7409	
	└ DISPLAY ASSY	AWX7698	AWX7698	AWX7699	AWX7700	
NSP	└ ROTARY ENCODER ASSY	AWX7328	AWX7328	AWX7726	AWX7726	
	└ H. PHONE/F. VIDEO ASSY	AWX7342	AWX7342	AWX7528	AWX7528	
	└ VOLUME ASSY	AWX7367	AWX7367	Not used	Not used	
NSP	POWER/CURRENT ASSY	AWK7650	AWK7651	AWK7652	AWK7652	
NSP	└ C-AMP-P ASSY	AWX7680	AWX7680	AWX7680	AWX7680	
	└ C-AMP-N ASSY	AWX7681	AWX7681	AWX7681	AWX7681	
NSP	└ OUTPUT-FL ASSY	AWX7682	AWX7682	AWX7682	AWX7682	
NSP	└ OUTPUT-FR ASSY	AWX7683	AWX7683	AWX7683	AWX7683	
NSP	└ OUTPUT-C ASSY	AWX7684	AWX7684	AWX7684	AWX7684	
NSP	└ OUTPUT-SL ASSY	AWX7685	AWX7685	AWX7685	AWX7685	
NSP	└ OUTPUT-SR ASSY	AWX7686	AWX7686	AWX7686	AWX7686	
NSP	└ VL-TERMINAL ASSY	AWX7657	AWX7657	AWX7657	AWX7657	
	└ TRANS 2-1 ASSY	AWX7659	AWX7694	AWX7695	AWX7695	
	└ DIODE ASSY	AWX7660	AWX7697	AWX7697	AWX7697	
	└ SP/PS ASSY	AWX7658	AWX7688	AWX7689	AWX7689	
	DSP ASSY	AWX7632	AWX7632	AWX7633	AWX7633	

■ CONTRAST OF PCB ASSEMBLIES

D MAIN CONTROL ASSY

AWX7705, AWX7706, AWX7707 and AWX7708 are constructed the same except for the following :

Mark	Symbol and Description	Part No.				Remarks
		AWX7705	AWX7706	AWX7707	AWX7708	
	IC112 IC113 IC114 R921 R922	M5220FP M5220L M5220L Not used RS1/10S103J	UPC4570G2 UPC4570HA UPC4570HA Not used RS1/10S103J	UPC4570G2 UPC4570HA UPC4570HA RS1/10S103J Not used	UPC4570G2 UPC4570HA UPC4570HA RS1/10S103J Not used	
	R923 R924 R925 R926 CN902 13P CONNECTOR	Not used RS1/10S103J RS1/10S103J Not used HLEM13R	RS1/10S103J Not used Not used RS1/10S103J HLEM13R	Not used RS1/10S103J Not used RS1/10S103J HLEM13R	RS1/10S103J Not used RS1/10S103J Not used HLEM13S	
	CN941 4P PIN JACK JA911 2P PIN JACK JA931 2P PIN JACK 103 6P PIN JACK 113 6P PIN JACK	Not used Not used Not used AKB7088 Not used	AKB7015 DKB1045 VKB1060 Not used AKB7089	AKB7015 DKB1045 VKB1060 Not used AKB7089	AKB7015 DKB1045 VKB1060 Not used AKB7089	
	JA901, JA911 4P PIN JACK	AKB7075	Not used	Not used	Not used	

E V-AMP ASSY

AWX7729, AWX7309 and AWX7409 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWX7729	AWX7309	AWX7409	
	IC7501, IC7521, IC7541, IC7601, IC7621 IC7502, IC7522, IC7542, IC7602, IC7622 Q7501, Q7521, Q7541, Q7601, Q7621 D7501, D7502, D7521, D7522, D7541, D7542 D7601, D7602, D7621, D7622	NJM2114MD NJM4558MD 2SC2878 1SS355 1SS355	UPC4570G2 NJM4558MD 2SC2878 1SS355 1SS355	UPC4570G2 Not used Not used Not used Not used	
	D7503, D7504, D7523, D7524, D7543, D7544 D7603, D7604, D7623, D7624 C7505, C7525, C7545, C7605, C7625 C7506, C7526, C7546, C7606, C7626 C7510, C7530, C7550, C7610, C7630	HZU2CLL HZU2CLL CCSQCH220J50 CEAT4R7M50 CKSQYB104K25	HZU2CLL HZU2CLL CCSQCH220J50 CEAT4R7M50 CKSQYB104K25	Not used Not used Not used Not used Not used	
	R7504, R7524, R7544, R7604, R7624 R7509, R7529, R7549, R7609, R7629 R7507, R7508, R7510, R7527, R7528, R7530 R7547, R7548, R7550, R7607, R7608, R7610 R7627, R7628, R7630	RS1/10S103J RS1/10S103J RS1/10S334J RS1/10S334J RS1/10S334J	RS1/10S103J RS1/10S103J RS1/10S334J RS1/10S334J RS1/10S334J	RS1/10S0R0J Not used Not used Not used Not used	
	R7511, R7531, R7551, R7611, R7631 R7512, R7513, R7516, R7517, R7532, R7533 R7536, R7537, R7552, R7553, R7556, R7557 R7612, R7613, R7616, R7617, R7632, R7633 R7636, R7637	RS1/10S102J RS1/10S473J RS1/10S473J RS1/10S473J RS1/10S473J	RS1/10S102J RS1/10S473J RS1/10S473J RS1/10S473J RS1/10S473J	Not used Not used Not used Not used Not used	
	R7514, R7534, R7554, R7614, R7634 R7515, R7518, R7535, R7538, R7555, R7558 R7615, R7618, R7635, R7638 R7641 R7653 - R7656, R7663 - R7666, R7673 - R7676 R7683 - R7686, R7693 - R7696	RS1/10S101J RS1/10S105J RS1/10S105J RS1/10S914J RS1/10S0R0J RS1/10S0R0J	RS1/10S101J RS1/10S105J RS1/10S105J RS1/10S914J RS1/10S0R0J RS1/10S0R0J	Not used Not used Not used Not used Not used Not used	

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

B A-PINJACK ASSY

AWX7312 and AWX7397 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7312	AWX7397	
	CN1014 6P PIN JACK JA1011 - JA1013 4P PIN JACK JA1015 4P PIN JACK 1016 2P PIN JACK	AKB7119 AKB7108 Not used Not used	Not used AKB7048 AKB7048 AKB7120	

P VIDEO ASSY

AWX7307 and AWX7394 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7307	AWX7394	
	JA701 3P PIN JACK JA703 3P PIN JACK 702 2P PIN JACK 707 1P PIN JACK 2P PIN JACK	AKB7109 AKB7116 AKB7076 Not used Not used	Not used AKB7115 Not used AKB7020 AKB7017	

Q S-VIDEO ASSY

AWX7678 and AWX7679 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7678	AWX7679	
	CN801 4P MINI DIN SOCKET CN802, CN803 4P MINI DIN SOCKET JA801 4P MINI DIN SOCKET	Not used AKP7023 AKP7049	AKP7043 AKP7020 Not used	

S DISPLAY ASSY

AWX7698, AWX7699 and AWX7700 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWX7698	AWX7699	AWX7700	
	IC7071 Q7002, Q7054 D7002 D7071 - D7079 S7019, S7020	M66311FP DTC124EK SLR-343DC(NPQ) SLR-343VR(MNP) VSG1009	Not used DTC124EK SLR-343DC(NPQ) Not used VSG1009	Not used Not used Not used Not used Not used	
	C7011, C7073, C7074 C7071 C7072 L7011, L7012 R7038	CKSQYB102K50 CEAL101M6R3 CKSQYB473K50 Not used RS1/10S271J	Not used Not used Not used Not used RS1/10S271J	Not used Not used Not used LCTA330J3225 Not used	
	R7042 R7061 R7071 - R7079 R7080 - R7083 R7092	RS1/10S103J RS1/10S103J RS1/10S271J RS1/10S102J RS1/10S473J	RS1/10S223J RS1/10S103J Not used Not used Not used	RS1/10S223J Not used Not used Not used Not used	
	R7099, R7100 CN7003 8P FFC CONNECTOR 505	RS1/10S0R0J 52045-0845 VEF1040	RS1/10S0R0J Not used Not used	Not used Not used Not used	

T ROTARY ENCODER ASSY

AWX7328 and AWX7726 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7328	AWX7726	
	S7101 C7103, C7104 R7103, R7104	Not used Not used Not used	ASX7004 CKSQYB103K50 RS1/10S103J	

Y DSP ASSY

AWX7632 and AWX7633 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7632	AWX7633	
	IC9041 IC9071 IC9091 Q9001, Q9002, Q9004 - Q9006, Q9031 Q9003, Q9032	NJM4558MD PM4007A LH52256CN-70LL 2SC3082K (NP) 2PD601A (QR)	Not used Not used Not used Not used Not used	
	Q9007 D9001 D9002 F9001 L9003	2PB709A (QR) KV1851 1SS355 ATF7001 ATH7001	Not used Not used Not used Not used Not used	
	L9071 F9091, F9092 C9002 - C9006, C9008 - C9013, C9015, C9017 C9018, C9031, C9032, C9051, C9052 C9055, C9077, C9079, C9081, C9092	ATL7002 DTF1064 CKSRYF104Z16 CKSRYF104Z16 CKSRYF104Z16	Not used Not used Not used Not used Not used	
	C9043, C9058, C9073 - C9075, C9078, C9080 C9007 C9014, C9054, C9056, C9070 C9016 C9033	CKSQYF104Z25 CCSRCH750J50 CKSRYB103K50 CEJA470M25 CCSRCH101J50	Not used Not used Not used Not used Not used	
	C9041, C9042 C9053 C9057 C9071 C9076	CKSRYF105Z10 CEJQNP4R7M25 CCSRCH270J50 CEJQ101M10 CCSQCH271J50	Not used Not used Not used Not used Not used	
	C9091 C9095 R9002, R9010, R9011, R9018, R9038, R9053 R9054, R9071, R9072 R9003, R9019	CEJA470M16 CCSRCH221J50 RS1/16S103J RS1/16S103J RS1/16S512J	Not used Not used Not used Not used Not used	
	R9004, R9015, R9016, R9020 R9005, R9006, R9014, R9021, R9022, R9025 R9073 R9007, R9023, R9033 R9008, R9027, R9030	RS1/16S202J RS1/16S102J RS1/16S102J RS1/16S220J RS1/16S302J	Not used Not used Not used Not used Not used	
	R9009, R9074 R9013, R9017, R9034 R9024, R9026 R9028, R9029 R9031, R9032	RS1/16S221J RS1/16S152J RS1/16S332J RS1/16S561J RS1/16S333J	Not used Not used Not used Not used Not used	
	R9035 R9036, R9091, R9095, R9096 R9037, R9039 R9041 R9042, R9044, R9062	RS1/16S223J RS1/16S0R0J RS1/16S274J RS1/16S472J RS1/16S392J	Not used Not used Not used Not used Not used	
	R9043 R9046 R9047 R9051 R9052	RS1/16S273J RS1/16S104J RS1/16S432J RS1/16S393J RS1/16S243J	Not used Not used Not used Not used Not used	
	R9055 R9056 R9057 - R9059 R9061 R9075, R9076	RS1/16S121J RS1/16S683J RS1/16S473J RS1/16S471J RS1/16S101J	Not used Not used Not used Not used Not used	

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Y DSP ASSY

Mark	Symbol and Description	Part No.		Remarks
		AWX7632	AWX7633	
	CN9804 3P PLUG X9001 CRYSTAL RESONATOR (18.432MHz)	KM250MA3 ASS7009	Not used Not used	

K DIODE ASSY

AWX7660 and AWX7697 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7660	AWX7697	
	D3001, D3002	LN6SB60-4003	D5SBA20(B)	

W RF/DIGITAL IN ASSY

AWX7637, AWX7638 and AWX7642 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWX7637	AWX7638	AWX7642	
	JA1204 2P PIN JACK 1200	AKB7092 VEF1040	AKB7091 VEF1040	AKB7095 Not used	

Z COMPONENT ASSY

AWX7635 and AWX7636 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7635	AWX7636	
	JA1501 3P PIN JACK JA1502 3P PIN JACK	AKB7127 AKB7125	AKB7128 AKB7126	

J TRANS 2-1 ASSY

AWX7659, AWX7694 and AWX7695 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWX7659	AWX7694	AWX7695	
	C4501, C4503, C4504 C4502 C4509, C4510 C4511, C4512 C4513 D4513 Q4503 Q4504 Q4505 R4501, R4503, R4511 R4502, R4504	ACH1237-A ACH1237-A CECA101M50 ACH1237-A ACH1237-A Not used Not used Not used Not used RFA1/4PS100J RFA1/4PS100J	Not used ACH1237-A CEAT101M50 Not used ACH1237-A Not used Not used Not used Not used Not used RFA1/4PS100J	Not used Not used CEAT101M50 Not used Not used MTZJ16B DTC143ES DTA143ES DTC124ES Not used Not used	

R H. PHONE / F. VIDEO ASSY

Although AWX7343 and AWX7528 are different in part number, they consist of the same components.

AA 2CH I/O PJ ASSY

AWX7634 and AWX7646 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7634	AWX7646	
	CN8004	AKB7129	AKB7087	

L SP / PS ASSY

AWX7658, AWX7688 and AWX7689 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWX7658	AWX7688	AWX7689	
	C3001, C3002 C3119 - C3122 L3001, L3002 Q3005 RY3101, RY3103, RY3104	ACH7147 CEAT470M50 ATX1012 Not used ASR-109	ACH7068 Not used ATX1012 Not used ASR7014	ACH7130 Not used Not used DTA124ES ASR7014	

PCB PARTS LIST FOR VSX-39TX/KU/CA

Mark	No.	Description	Part No.
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A EXTRA-5.1 ASSY
CAPACITORS

C1107-C1112	CEAT4R7M50
C1113-C1115	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J
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OTHERS

JA1101-JA1103 2P PIN JACK	AKB7121
CN1101 8P SOCKET	KP200TA8L

A EXTERNAL IN ASSY**CAPACITORS**

C1107-C1112	CEAT4R7M50
C1113-C1115	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J
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OTHERS

JA1101-JA1103	AKB7121
CN1101 8P SOCKET	KP200TA8L

Mark	No.	Description	Part No.
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B A-PINJACK ASSY
CAPACITORS

C1019-C1022	CKCYF103Z50
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RESISTORS

All Resistors	RD1/4PU□□□J
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OTHERS

JA1011-JA1013 4P PIN JACK	AKB7108
CN1014 6P PIN JACK	AKB7119
CN1001 18P SOCKET	KP200TA18L
CN1002 4P SOCKET	KP200TA4L

C CONNECTION ASSY
SEMICONDUCTORS

IC1351	M5220P
IC1301-IC1303	NJM4558D-D

CAPACITORS

C1351, C1352	CEAT100M50
C1365, C1366	CEAT101M16
C1363, C1364	CEAT2R2M50

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Mark	No.	Description	Part No.
	C1357,C1358		CEAT470M25
	C1307-C1312		CEAT4R7M50
	C1313-C1318		CKCYF103Z50
	C1361,C1362		CQMA242J50
	C1359,C1360		CQMBA822J50

RESISTORS

All Resistors	RD1/4PU□□□□
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OTHERS

CN1351 18P PLUG	KM200TA18
CN1352 4P PLUG	KM200TA4
CN1301 8P PLUG	KM200TA8
CN1302 10P SOCKET	KP200TA10L
CN1353 20P SOCKET	KP200TA20L

D MAIN CONTROL ASSY

SEMICONDUCTORS

IC102	BU4052BCF
IC110	M62429FP
IC103,IC105,IC109	NJM4558MD
IC901	PD5589A
IC104,IC107	TC9163AF
IC101	TC9274N-001
IC108	TC9482N
IC112	M5220FP
IC113,IC114	M5220L
Q991	2SC1740S
Q251,Q252	2SC2412K
Q113,Q114,Q271,Q272	2SC2878
Q902-Q905	DTA124EK
Q901	DTC143EK
Q107-Q112	HN1C03F
D254,D255,D901-D910,D991	1SS355
D995	UDZ11B
D201,D202,D256	UDZS5.1B

COIL

L901 CHIP COIL	LC2A2R2J3225
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CAPACITORS

C902	ACH7058
C951-C964	CCSQCH101J50
C157,C158,C167,C168,C177	CCSQCH560J50
C111,C112,C117,C118	CEAT100M50
C127-C130,C141,C142	CEAT100M50
C145,C146,C149,C150	CEAT100M50
C153,C154,C159,C160	CEAT100M50
C163,C164,C169,C170	CEAT100M50
C173,C174,C179,C180	CEAT100M50
C255,C256,C277,C278	CEAT100M50
C123-C126,C991	CEAT101M16
C147,C148,C257	CEAT1R0M50
C903	CEAT221M10
C121,C122	CEAT221M16
C905	CEAT2R2M50
C915	CEAT331M10
C107,C108,C115,C116	CKSQYB103K50
C133-C140,C143,C144	CKSQYB103K50
C161,C162,C279,C280,C901	CKSQYB103K50
C904,C908,C909,C914,C919	CKSQYB103K50

Mark	No.	Description	Part No.
	C965		CKSQYB103K50
	C273,C274		CKSQYB104K25
	C275,C276		CKSQYB332K50
	C178		CKSQYB333K50
	C271,C272		CKSQYB472K50

C910,C912	CKSQYB473K50
C906	CKSQYF105Z16
C992	CKSQYF225Z16

RESISTORS

R948	RA12T473J
R913	RA5T103J
R949	RA8T103J
R109	RD1/2VM391J
Other Resistors	RS1/10S□□□□

OTHERS

X901 CERAMIC RESONATOR (4.19MHz)	ASS1018
CN903 7P FFC CONNECTOR	HLEM7R-1
CN902 13P FFC CONNECTOR	HLEM13R-1
CN906 5P FFC CONNECTOR	HLEM5S-1
CN105 23P FFC CONNECTOR	HLEM23S-1
CN905 26P FFC CONNECTOR	HLEM26S-1
CN904 32P FFC CONNECTOR	HLEM32S-1
CN901,CN911 4P PIN JACK	AKB7075
103 6P PIN JACK	AKB7088
CN103 10P PLUG	KM200TA10
CN101 20P PLUG	KM200TA20
CN104 16P SOCKET	KP200IA16L
CN901 15P SOCKET	KP200TA15L
CN920 7P SOCKET	KP200TA7L
CN108 9P SOCKET	KP200TA9L
909,912,913 PCB BINDER	VEF1040

E V-AMP ASSY

SEMICONDUCTORS

IC581	BU4052BCF
IC7502,IC7522,IC7542,IC7602,IC7622	NJM4558MD
IC7501,IC7521,IC7541,IC7601,IC7621	NJM2114MD
Q503,Q523,Q543,Q603,Q623	2SA1048
Q506,Q509,Q526,Q529,Q546	2SA970
Q549,Q606,Q609,Q626,Q629	2SA970
Q507,Q508,Q527,Q528	2SC2240
Q547,Q548,Q607,Q608	2SC2240
Q561	2SC2240
Q627,Q628	2SC2240
Q510,Q530,Q550,Q610,Q630	2SC2878
Q7501,Q7521,Q7541,Q7601,Q7621	2SC2878
Q501,Q521,Q541,Q601,Q621	FMS3
Q504,Q524,Q544,Q604,Q624	FMW4
D501,D502,D504,D505	1SS355
D521,D522,D524,D525	1SS355
D541,D542,D544,D545	1SS355
D581-D588,D601,D602	1SS355
D604,D605,D621,D622	1SS355
D624,D625,D7501,D7502	1SS355
D7521,D7522,D7541,D7542	1SS355
D7601,D7602,D7621,D7622	1SS355
D7503,D7504,D7523,D7524	HZU2CLL

Mark	No.	Description	Part No.
		D7543,D7544,D7603,D7604	HZU2CLL
		D7623,D7624	HZU2CLL
△		D503,D523,D543,D603,D623	UDZS6.8B
		D506,D526,D546,D606,D626	UDZS8.2B

CAPACITORS

C511,C512,C531,C532	CCCSL181K2H
C551,C552,C611,C612	CCCSL181K2H
C631,C632	CCCSL181K2H
C509,C529,C549,C609,C629	CCCSL5R0C2H
C504,C524,C544,C604,C624	CCSQCH101J50

C7504,C7505,C7524,C7525	CCSQCH220J50
C7544,C7545,C7604,C7605	CCSQCH220J50
C7624,C7625	CCSQCH220J50
C502,C522,C542,C602,C622	CCSQCH221J50
C506,C507,C526,C527	CCSQL560J50

C546,C547,C606,C607	CCSQL560J50
C626,C627	CCSQL560J50
C7501,C7521,C7541,C7601,C7621	CEAT100M50
C505,C508,C525,C528,C545	CEAT101M16
C548,C605,C608,C625,C628	CEAT101M16

C510,C530,C550,C610,C630	CEAT470M16
C513,C533,C553,C568,C569	CEAT470M50
C613,C633	CEAT470M50
C501,C521,C541,C601,C621	CEAT4R7M50
C7506,C7526,C7546,C7606,C7626	CEAT4R7M50

C7502,C7503,C7510,C7512	CKSQYB104K25
C7522,C7523,C7530,C7532	CKSQYB104K25
C7542,C7543,C7550,C7552	CKSQYB104K25
C7602,C7603,C7610,C7612	CKSQYB104K25
C7622,C7623,C7630,C7632	CKSQYB104K25

C561-C565	CKSQYB222K50
C503,C523,C543,C603,C623	CKSQYB332K50
C570	CKSQYF223Z50
C581,C582	CKSQYF225Z16

RESISTORS

R518,R538,R558,R618,R638	RD1/4MUF473J
△ R513,R514,R533,R534	RS1/10S121J
△ R553,R554,R613,R614	RS1/10S121J
△ R633,R634	RS1/10S121J
Other Resistors	RS1/10S□□□J

OTHERS

CN501	23P FFC CONNECTOR	52045-2345
CN502	28P FFC CONNECTOR	52045-2845
CN504	3P PLUG	KM250MA3
506	PCB BINDER	VEF1040

F C-AMP-N ASSY

SEMICONDUCTORS

Q2503,Q2523,Q2543,Q2603,Q2623	2SA970
Q2001,Q2002	2SC1740S
Q2502,Q2522,Q2542,Q2602,Q2622	2SC4137
△ Q2501,Q2521,Q2541,Q2601,Q2621	IRF540A
D2501-D2504,D2521-D2524	1SS133

D2541-D2544,D2601-D2604	1SS133
D2621-D2624	1SS133

CAPACITORS

C2501,C2521,C2541,C2601,C2621	CEANPR22M50
C2001	CEAT101M10

Mark	No.	Description	Part No.
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RESISTORS

△ R2506,R2510,R2526,R2530,R2546	RD1/4PUF391J
△ R2550,R2606,R2610,R2626,R2630	RD1/4PUF391J
△ R2501,R2521,R2541,R2601,R2621	RD1/4PUF470J
VR2501,VR2521,VR2541,VR2601	RCP1134
(22Ω)	

VR2621 (22Ω)	RCP1134
Other Resistors	RD1/4PU□□□J

OTHERS

CN2001 28P FFC CONNECTOR	HLEM28S-1
CN2501,CN2521,CN2541,CN2601	KM250NA7L
7P PLUG	
CN2621 8P PLUG	KM250NA8L

G C-AMP-P ASSY

SEMICONDUCTORS

△ Q2504,Q2524,Q2544,Q2604,Q2624	IRF9540A
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RESISTORS

△ R2511,R2531,R2551,R2611,R2631	RD1/4PUF470J
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OTHERS

CN2504,CN2524,CN2544,CN2604	KM250NA5L
5P PLUG	
CN2624 5P PLUG	KM250NA5L

HA OUTPUT-SL ASSY

RESISTOR

△ R2612 (0.05Ω/5W)	ACN7097
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OTHERS

CN2603 5P SOCKET	KP250NA5
CN2602 7P SOCKET	KP250NA7

HB OUTPUT-FL ASSY

RESISTOR

△ R2512 (0.05Ω/5W)	ACN7097
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OTHERS

CN2503 5P SOCKET	KP250NA5
CN2502 7P SOCKET	KP250NA7

HC OUTPUT-C ASSY

RESISTOR

△ R2552 (0.05Ω/5W)	ACN7097
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OTHERS

CN2543 5P SOCKET	KP250NA5
CN2542 7P SOCKET	KP250NA7

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Mark	No.	Description	Part No.
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HD OUTPUT-FR ASSY RESISTOR

△	R2532 (0.05Ω/5W)	ACN7097
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OTHERS

CN2523	5P SOCKET	KP250NA5
CN2522	7P SOCKET	KP250NA7

HE OUTPUT-SR ASSY RESISTOR

△	R2632 (0.05Ω/5W)	ACN7097
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OTHERS

CN2623	5P SOCKET	KP250NA5
CN2622	8P SOCKET	KP250NA8

I VL-TERMINAL ASSY CAPACITORS

C2011, C2012	CEAT470M63
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OTHERS

KN2011, KN2012	GROUND PLATE	ANK-142
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J TRANS 2-1 ASSY SEMICONDUCTORS

△	IC4501, IC4502 (2.5A)	AEK7014
△	Q4502	2SA1837
△	Q4501	2SC4793
	D4509, D4510	MTZJ12B
	D4505, D4508	MTZJ20A
△	D4501, D4504	S5688G
	D4511, D4512	S5688G

CAPACITORS

C4501, C4504, C4511, C4513	ACH1237
C4509, C4510	CECA101M50
C4507, C4508	CEAT471M63

RESISTORS

△	R4509, R4510	RD1/4PMF332J
	R4501, R4504, R4511	RFA1/4PS100J
	Other Resistors	RD1/4PU□□□J

OTHERS

4001	9P CABLE HOLDER	51048-0900
H4501, H4504	FUSE CLIP	AKR1004
4501, 4502	HEAT SINK	ANH-309
4503, 4504	SCREW	BPZ30P080FZK

Mark	No.	Description	Part No.
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K DIODE ASSY SEMICONDUCTORS

△	D3001, D3002	LN6SB60-4003
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L SPI/PS ASSY SEMICONDUCTORS

Q3156, Q3159	DTA124ES
Q3151, Q3155	DTC143ES
D3051, D3053, D3055, D3057, D3059	1SS133

COILS AND FILTERS

L3101, L3105	AF CHOKE COIL	ATH1053
L3001, L3002	CHIP BEAD	ATX1012

RELAYS

RY3101, RY3103, RY3104	ASR-109
RY3102, RY3105	ASR7014

CAPACITORS

C3001, C3002 (22000μF/56V)	ACH7147
C3118, C3122	CEAT470M50
C3101, C3105	CFTYA104J50
C3111, C3117	CQHA102J2A

RESISTORS

R3151, R3155	RD1/2PM331J
△	R3101, R3105
	RD1/4PMF4R7J
	RD1/4PMF473J
△	R3106, R3110
△	R3131, R3132
Other Resistors	RD1/4PM□□□J

OTHERS

3004	8P CABLE HOLDER	51048-0800
3001	9P CABLE HOLDER	51048-0900
CN3003	14P FFC CONNECTOR	HLEM14S-1
CN3101	8P SPEAKER TERMINAL	AKE7058
CN3102	6P SPEAKER TERMINAL	AKE7060
J3002	JUMPER WIRE 8P	D20PYY0825E
J3001	JUMPER WIRE 9P	D20PYY0915E
CN3001	4P PLUG	KM200TA4

M REGULATOR ASSY SEMICONDUCTORS

△	IC5009, IC5010 (200mA)	AEK7023
△	IC5004, IC5008	NJM78M05FA
△	IC5003	NJM78M12FA
△	IC5001	NJM78M15FA
△	IC5005, IC5007	NJM78M56FA
△	IC5006	NJM79M05FA
△	IC5002	NJM79M15FA
	D5010, D5051	1SS133
△	D5009	D3SBA20(B)
	D5012, D5014	MTZJ10C
	D5011	MTZJ5.1B
△	D5001, D5008, D5015, D5017	S5688G

Mark	No.	Description	Part No.
CAPACITORS			
	C5015,C5017,C5019,C5021,C5023		CEAT101M10
	C5009,C5011,C5013,C5025		CEAT101M25
	C5024		CEAT101M50
	C5051		CEAT221M10
	C5026		CEAT221M35
	C5027,C5028		CEAT221M50
	C5001,C5003,C5006		CEAT222M25
	C5002,C5004		CEAT222M35
	C5005		CEAT332M25
	C5007		CEAT472M16
	C5008,C5010,C5012,C5014,C5016		CKCYF103Z50
	C5018,C5020,C5022		CKCYF103Z50

RESISTORS

R5001-R5003	RD1/2PM620J
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OTHERS

5009	4P CABLE HOLDER	51048-0400
CN5002	14P FFC CONNECTOR	52045-1445
CN5001	8P JUMPER CONNECTOR	52147-0810
J5000	BOARD IN WIRE	DB022ND0
CN5004	16P PLUG	KM200IA16
CN5005	15P PLUG	KM200TA15
CN5007	17P PLUG	KM200TA17
CN5008	7P PLUG	KM200TA7
CN5003,CN5006	9P PLUG	KM200TA9
KN5001,KN5002		VNF1084
	EARTH METAL FITTING	

N TRANS 1 ASSY

TRANS 1 Assy has no service parts.

O TRANS 2-2 ASSY

SEMICONDUCTOR

△	IC5501 (4A)	AEK7018
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OTHERS

5501	4P CABLE HOLDER	51048-0400
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P VIDEO ASSY

SEMICONDUCTORS

IC751	BU4053BCF
IC752	LC74782M-9011
IC731	NJM2279M
IC701	NJM2296M
Q701	2SA933S
Q751-Q754	2SC1740S
Q755	DTC124EK
D701,D702,D731,D751-D753	1SS355

COILS

L752,L753	CHIP COIL	LCTA100J3225
L751	CHIP COIL	LCTA330J3225

Mark	No.	Description	Part No.
CAPACITORS			
	C753		CCSQCH100D50
	C763,C772		CCSQCH101J50
	C715,C759		CCSQCH150J50
	C760		CCSQCH180J50
	C705-C707,C731		CCSQCH181J50
	C761,C762		CCSQCH240J50
	C754		CEAT100M50
	C701-C704,C710-C712		CEAT101M10
	C734,C735,C755,C764,C765		CEAT101M10
	C781-C784		CEAT101M10
	C713,C768,C769		CEAT101M16
	C757		CEAT1R0M50
	C752		CEAT330M16
	C791,C795,C797		CKSQYB103K50
	C756		CKSQYB122K50
	C708,C709,C714,C732,C733		CKSQYB473K50
	C736,C766,C767,C770,C771		CKSQYB473K50
	C785,C786,C793		CKSQYB473K50

RESISTORS

R715	RD1/2VM201J
Other Resistors	RS1/10S□□□J

OTHERS

X751	CRYSTAL RESONATOR (14.31818MHz)	ASS1056
CN702	21P FFC CONNECTOR	52045-2145
CN701	26P FFC CONNECTOR	52045-2645
702	2P PIN JACK	AKB7076
JA701	3P PIN JACK	AKB7109
JA703	3P PIN AJCK	AKB7116
JA705	MULTI HOME JACK	AKN7014
704	PCB BINDER	VEF1040

Q S-VIDEO ASSY

SEMICONDUCTORS

IC831	BU4051BCF
IC852	BU4053BCF
IC851	LA7213
IC801,IC802	NJM2296M
Q852,Q853	2SA933S
Q851	DTC124ES
Q833,Q834	IMH11
Q831	IMZ1A
D801,D802,D804,D805,D831	1SS355
D832,D851	1SS355

CAPACITORS

C857	CCSQCH100D50
C854	CCSQCH151J50
C815-C818,C861,C862	CCSQCH181J50
C898	CCSQCH221J50
C809,C858	CCSQCH330J50
C801,C803,C805,C807	CEAT101M10
C819-C822,C852,C853,C863	CEAT101M10
C881,C882	CEAT101M10
C866,C868	CEAT101M16
C851	CEAT3R3M50
C831-C836,C855,C856,C891	CKSQYB103K50

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Mark	No.	Description	Part No.
	C893,C894,C899		CKSQYB103K50
	C810-C814,C859,C860		CKSQYB104K25
	C864,C865		CKSQYB104K25
	C802,C804,C806,C808		CKSQYB473K50
	C823-C826,C867,C869		CKSQYB473K50

RESISTORS

R864	RD1/2VM201J
R859	RD1/4VM471J
Other Resistors	RS1/10S□□□J

OTHERS

CN804	21P FFC CONNECTOR	HLEM21S-1
CN802,CN803		AKP7023
	4P MINI DIN SOCKET	
CN805	6P FFC CONNECTOR	HLEM6S-1
JA801	4P MINI DIN SOCKET	AKP7049
JA881,JA882		RKN1004
	REMOTE CONTROL JACK	
801	PCB BINDER	VEF1040

R H. PHONE/F. VIDEO ASSY

SEMICONDUCTORS

Q7201,Q7202	2SC1740S
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CAPACITORS

C7201,C7202,C7215,C7216	CCSQCH271J50
C7203,C7204	CCSQCH330J50
C7208,C7209	CEAT101M10
C7207	CEAT470M35
C7210,C7212	CKSQYB103K50
C7211	CKSQYB104K25
C7213,C7214	CKSQYB105K10
C7217,C7218	CKSQYB392K50

RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN7201	12P FFC CONNECTOR	52045-1245
CN7202	FRONT PIN JACK 4P	AKX7007
JA7201	HEADPHONE JACK	RKB1014
KN7201	EARTH METAL FITTING	VNF1084

S DISPLAY ASSY

SEMICONDUCTORS

IC7071	M66311FP
IC7001	PD5595A
IC7051	TC7W53FU
Q7051	2SA1037K
Q7005	2SC2412K
Q7001,Q7002,Q7052,Q7054	DTC124EK
Q7053	FMA1A
D7007-D7010,D7051-D7057	1SS355
D7002	SLR-343DC(NPQ)
D7001,D7071-D7079	SLR-343VR(MNP)

COIL

L7001	LFA2R2J
L7011,L7012	LCTA330J3225

Mark	No.	Description	Part No.
		SWITCHES	
	S7001-S7030		VSG1009

CAPACITORS

C7010 (0.047μF/5.5V)	ACH7132
C7007	CCSQCH101J50
C7008,C7013,C7071	CEAL101M6R3
C7701,C7702	CEAT100M50
C7052	CEAT101M6R3

C7001-C7005,C7011,C7073,C7074	CKSQYB102K50
C7091	CKSQYB102K50
C7051	CKSQYB103K50
C7009,C7072	CKSQYB473K50
C7053	CKSQYB153K50

RESISTORS

R7044	RA15T104J
Other Resistors	RS1/10S□□□J

OTHERS

X7001	CERAMIC RESONATOR (7.2MHz)	ASS7018
7001	3P CABLE HOLDER	51052-0300
7002,7003	8P CABLE HOLDER	51052-0800
CN7005	5P FFC CONNECTOR	52045-0545
CN7002	6P FFC CONNECTOR	52045-0645
CN7003	8P FFC CONNECTOR	52045-0845
CN7004	12P FFC CONNECTOR	52045-1245
CN7001	32P FFC CONNECTOR	52045-3245
V7001	FL TUBE	AAV7063
505	PCB BINDER	VEF1040

T ROTARY ENCODER ASSY

SWITCH

S7102	ASX7031
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CAPACITORS

C7101,C7102	CKSQYB103K50
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RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN7101	6P FFC CONNECTOR	52044-0645
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U VOLUME ASSY

SEMICONDUCTORS

Q7301,Q7302	2SA1993
Q7303,Q7304	2SC5395
D7301	1SR154-400

CAPACITORS

C7301	CEANP100M16
C7302	CEAT220M50
C7303	CEAT471M6R3

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Mark	No.	Description	Part No.
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RESISTORS

VR7301 (VARIABLE WITH MOTOR)	ACX7037
Other Resistors	RS1/10S□□□J

OTHERS

CN7301 8P FFC CONNECTOR	52045-0845
KN7301 EARTH METAL FITTING	VNF1084

V PRIMARY ASSY

SEMICONDUCTORS

△ IC6001	NJM78M56FA
Q6001	DTC143ES
D6005-D6007	1SS133
D6008	MTZJ5.1A
△ D6001-D6004	S5688G

COIL

△ L6001 LINE FILTER	ATF1006
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TRANSFORMER

△ T6001 STANDBY TRANS.	ATT7043
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RELAY

△ RY6001 POWER RELAY	ASR7022
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CAPACITORS

△ C6002,C6003 (10000pF/AC250V)	ACG7020
C6005	CEAT102M16
C6006	CEAT470M25
C6004	CKCYF103Z50

RESISTORS

R6001 (2.2MΩ, 1/2W)	RCN1080
R6003	RD1/2PM270J
Other Resistors	RD1/4PU□□□J

OTHERS

△ 6004 3P AC OUTLET	AKP1053
H6001,H6002 FUSE CLIP	AKR1004
CN6003 4P SOCKET	KP200TA4L
△ CN6002 AC CORD SOCKET	RKP1751
6005 PCB BINDER	VEF1040
6002,6003 SCREW TERMINAL	VNE1948

W RF/DIGITAL IN ASSY

SEMICONDUCTORS

IC1201	TC74HCU04AF
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COILS AND FILTERS

F1203-F1206 CHIP BEAD	DTF1064
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CAPACITORS

C1204,C1211	CCSQCH470J50
C1206,C1213	CEAT470M10
C1203,C1210,C1250	CKSQYB103K50
C1207,C1212,C1215,C1216	CKSQYF104Z25
C1236,C1237	CKSQYF104Z25
C1251	CKSQYF473Z25

Mark	No.	Description	Part No.
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RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN1201 13P FFC CONNECTOR	HLEM13S-1
CN1202 4P FFC CONNECTOR	HLEM4S-1
JA1204 3P PIN JACK	AKB7092
JA1201,JA1202,JA1203	GP1FA551RZ
OPTICAL RECEIVE MOD.	

CN1250 3P PLUG	KM250MA3
1200 PCB BINDER	VEF1040

X OPT OUT ASSY

CAPACITORS

C1271,C1272	CKSQYF104Z50
C1273,C1274	CEAT221M10

RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN1271 4P FFC CONNECTOR	HLEM4S-1
JA1271,JA1272	GP1FA551TZ
OPTICAL LINK MOD.	

Y DSP ASSY

SEMICONDUCTORS

IC9351	AK7706VT
IC9301	CS493292
IC9203	CS5360-KS
IC9101	CS8414-CS
IC9201,IC9202	NJM2100M
IC9041	NJM4558MD
IC9401,IC9421,IC9441,IC9461	PCM1716E4
IC9501	PD5590A
IC9304	PDN030A
IC9071	PM4007A
IC9391	PQ7VZ5
IC9392	PQ20WZ51
IC9091	LH52256CN-70LL
IC9305	TC74LVX244FT
IC9352	TC551001CST-70L

IC9151	TC74ACT151F
IC9102	TC74VHC157FT
IC9302,IC9303	TC74VHC574F
IC9306	TC74VHCT244AFT
IC9309	TC7W125FU

IC9204,IC9307	TC7WU04FU
IC9601	TC9164AF
IC9308	TC9246F
IC9602-IC9705,IC9701-IC9706	UPC4570G2
Q9007	2PB709A

Q9003,Q9032	2PD601A
Q9001,Q9002,Q9004-Q9006,Q9031	2SC3082K
Q9201,Q9202,Q9601-Q9606	2SC3326
Q9611,Q9612	2SC3326
Q9102,Q9104,Q9203,Q9607	DTA124EK

Q9609,Q9610	DTA124EK
Q9101,Q9103,Q9204,Q9205,Q9608	DTC124EK

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Mark	No.	Description	Part No.
	Q9500		DTA144EK
	D9601,D9602		1SS181
	D9201-D9204		1SS226
	D9002,D9501,D9502		1SS355
	D9001		KV1851

COILS AND FILTERS

F9001	BPF	ATF7001
L9003	INDUCTOR	ATH7001
L9071,L9391,L9392,L9401,L9402	CHIP FERRITE BEAD	ATL7002
L9421,L9422,L9441,L9442	CHIP FERRITE BEAD	ATL7002
L9461,L9462,L9481,L9482,L9801	CHIP FERRITE BEAD	ATL7002
L9807,L9809	CHIP FERRITE BEAD	ATL7002
F9091,F9092,F9102,F9106-F9108	CHIP BEAD	DTF1064
F9111,F9151,F9152,F9201,F9301	CHIP BEAD	DTF1064
F9302,F9306,F9308,F9352,F9501	CHIP BEAD	DTF1064
L9105,L9203,L9204,L9206,L9207	CHIP SOLID INDUCTOR	QTL1013
L9303	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

C9231,C9232,C9493-C9496,C9809	CCSQCH221J50
C9815,C9816	CCSQCH221J50
C9076,C9104,C9106,C9112,C9154	CCSQCH271J50
C9502	CCSQCH271J50
C9224,C9225	CCSQCH330J50
C9303,C9305,C9307,C9315,C9318	CCSQCH471J50
C9320,C9322,C9325,C9328,C9353	CCSQCH471J50
C9355,C9357,C9359,C9361,C9364	CCSQCH471J50
C9368	CCSQCH471J50
C9504,C9505	CCSQCH7R0D50
C9033,C9313,C9609,C9610	CCSRCH101J50
C9721,C9722,C9735	CCSRCH101J50
C9310	CCSRCH180J50
C9791,C9792	CCSRCH201J50
C9311	CCSRCH220J50
C9095,C9621,C9622,C9742-C9746	CCSRCH221J50
C9761-C9766,C9779-C9782	CCSRCH221J50
C9057,C9201,C9202	CCSRCH270J50
C9214,C9220,C9309,C9403,C9423	CCSRCH271J50
C9443,C9463,C9629	CCSRCH271J50
C9719,C9720,C9733,C9775,C9776	CCSRCH331J50
C9741	CCSRCH470J50
C9333,C9571,C9617,C9618,C9639	CCSRCH471J50
C9211,C9717,C9718,C9731,C9808	CCSRCH561J25
C9773,C9774	CCSRCH561J25
C9777,C9778	CCSRCH680J50
C9007	CCSRCH750J50
C9707,C9708	CCSRCH820J50
C9611,C9612	CCSRCH821J25
C9481	CEAT221M10
C9338	CEAT471M10
C9091,C9102,C9108,C9114,C9151	CEJA470M16
C9362	CEJA470M16
C9016	CEJA470M25
C9323,C9326,C9331,C9366	CEJQ100M25
C9643,C9644,C9756	CEJQ100M25

Mark	No.	Description	Part No.
	C9071,C9301,C9316,C9351,C9392 C9395,C9501,C9740,C9801 C9329 C9216,C9219,C9222,C9401,C9405 C9408,C9421,C9425,C9428,C9441 C9337 C9803,C9805	CEJQ101M10 CEJQ101M10 CEJQ2R2M50 CEJQ330M10 CEJQ330M10 CEJQ470M10 CEJQ470M25	
	C9406,C9409,C9426,C9429,C9446 C9449,C9466,C9469 C9206,C9207,C9391,C9394 C9053 C9110	CEJQ470M6R3 CEJQ470M6R3 CEJQ4R7M50 CEJQNP4R7M25 CEJQR47M50	
	C9713,C9714,C9727,C9728,C9739 C9751-C9755,C9757,C9758 C9785,C9786 C9203,C9204,C9603,C9604 C9615,C9616,C9627,C9628	CEWAR330M10 CEWAR330M10 CEWAR330M10 CEWAR4R7M50 CEWAR4R7M50	
	C9789,C9790 C9070,C9103,C9107,C9113,C9153 C9217,C9223,C9302,C9304,C9306 C9314,C9317,C9319,C9321,C9324 C9327,C9336,C9352,C9354,C9356	CEWAR4R7M50 CKSQYB103K50 CKSQYB103K50 CKSQYB103K50 CKSQYB103K50	
	C9358,C9360,C9363,C9367 C9507,C9508 C9334 C9335 C9509	CKSQYB103K50 CKSQYB103K50 CKSQYB123K50 CKSQYB474K16 CKSQYF103Z50	
	C9043,C9058,C9073-C9075,C9078 C9080,C9205,C9208,C9503 C9212,C9575 C9014,C9054,C9056,C9105,C9158 C9221,C9308,C9332,C9402,C9422	CKSQYF104Z25 CKSQYF104Z25 CKSRYB102K50 CKSRYB103K50 CKSRYB103K50	
	C9442,C9462,C9506,C9636,C9637 C9626,C9730 C9605,C9606,C9633,C9795,C9796 C9703,C9704,C9715,C9716,C9729 C9771,C9772	CKSRYB103K50 CKSRYB104K16 CKSRYB122K50 CKSRYB182K50 CKSRYB182K50	
	C9601,C9602,C9613,C9614,C9625 C9787,C9788 C9701,C9702 C9732 C9645	CKSRYB222K50 CKSRYB222K50 CKSRYB272K50 CKSRYB333K16 CKSRYB472K50	
	C9215,C9218,C9404,C9407,C9424 C9427,C944,C9447,C9464,C9467 C9111 C9020 C9736	CKSRYB473K16 CKSRYB473K16 CKSRYB682K50 CKSRYB683K16 CKSRYB821K50	
	C9002-C9006,C9008-C9013,C9015 C9017,C9018,C9031,C9032 C9051,C9052,C9055,C9077,C9079 C9081,C9092,C9209,C9210 C9607,C9608,C9619,C9620	CKSRYF104Z16 CKSRYF104Z16 CKSRYF104Z16 CKSRYF104Z16 CKSRYF104Z16	
	C9631,C9632,C9709-C9712 C9723-C9726,C9737,C9738 C9783,C9784,C9793,C9794 C9041,C9042 C9312	CKSRYF104Z16 CKSRYF104Z16 CKSRYF104Z16 CKSRYF105Z10 CKSRYF224Z16	

RESISTORS

R9575	ACN7060
R9571	DCN1092
R9377,R9378	DCN1094
R9036,R9099,R9119,R9130,R9131	RS1/10S0R0J

Mark	No.	Description	Part No.
	R9158,R9160,R9320,R9321,R9336 R9343,R9387,R9401,R9421,R9441 R9461,R9902-R9904,R9906 R9908,R9909,R9999 R9103,R9333,R9531-R9535		RS1/10S0R0J RS1/10S0R0J RS1/10S0R0J RS1/10S0R0J RS1/10S101J
	R9226,R9239,R9510,R9520 R9524-R9529 R9214,R9550 R9335 R9074,R9128		RS1/10S102J RS1/10S102J RS1/10S103J RS1/10S120J RS1/10S221J
	R9120,R9369 R9331 R9332 R9061,R9105 R9112		RS1/10S331J RS1/10S332J RS1/10S391J RS1/10S471J RS1/10S561J
	R9763,R9764 R9391,R9392 R9396 Other Resistors		RS1/10S822J RS1/16S1201F RS1/16S2001F RS1/16S□□□J

OTHERS

X9001	CRYSTAL RESONATOR (18.432MHz)	ASS7009
X9501	CRYSTAL RESONATOR (20MHz)	ASS7032
X9201	CRYSTAL RESONATOR (12.288MHz)	DSS1030
X9301	CHIP RESONATOR (27.0MHz)	VSS1086
CN9571	7P FFC CONNECTOR	HLEM7S-1
CN9581,CN9803	13P FFC CONNECTOR	HLEM13S-1
CN9804	3P PLUG	KM250MA3
CN9801	17P SOCKET	KP200TA17L
CN9802	9P SOCKET	KP200TA9L
CN9501	8P FFC CONNECTOR	VKN1598

Z COMPONENT ASSY

SEMICONDUCTORS

IC1501	TC74HC4053AF
IC1502,IC1503	TK15420M
IC1504	TC7S86F
IC1505	TC7S00F
Q1501-Q1503	DTC124EK

CAPACITORS

C1505,C1506,C1509-C1512 C1516-C1518 C1501-C1504,C1507,C1508	CKSQYB103K50 CKSQYB103K50 CEAT101M10
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RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN1501	6P FFC CONNECTOR	HLEM6S-1
JA1502	3P PIN JACK	AKB7125
JA1501	6P PIN JACK	AKB7127

Mark	No.	Description	Part No.
AA		2CH I/O PJ ASSY	
		SEMICONDUCTORS	
	IC8001 Q8001,Q8002		UPC4570G2 HN1C03F
	CAPACITORS		
	C8001,C8002 C8027,C8028,C8032 C8007,C8008,C8031 C8025,C8026 C8003,C8004,C8009,C8010		CCSQCH101J50 CCSQCH221J50 CKSQYF104Z25 CEAL100M50 CEAL4R7M50
	C8035,C8036		CEJA470M25
	RESISTORS		
	All Resistors		RS1/10S□□□J

OTHERS

CN8002	9P FFC CONNECTOR	HLEM9S-1
JA8004	4P PIN JACK	AKB7129

AB TRIM ASSY

SEMICONDUCTORS

IC8002	TC9215AF
IC8003	TC9459F
IC8004	UPC4570G2

CAPACITORS

C8019,C8020 C8021,C8022 C8011,C8012,C8015,C8016,C8023 C8024,C8039 C8017,C8018	CCSQCH331J50 CCSQCH560J50 CKSQYF104Z25 CKSQYF104Z25 CEAL100M50
C8033,C8034	CEJA470M25

RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

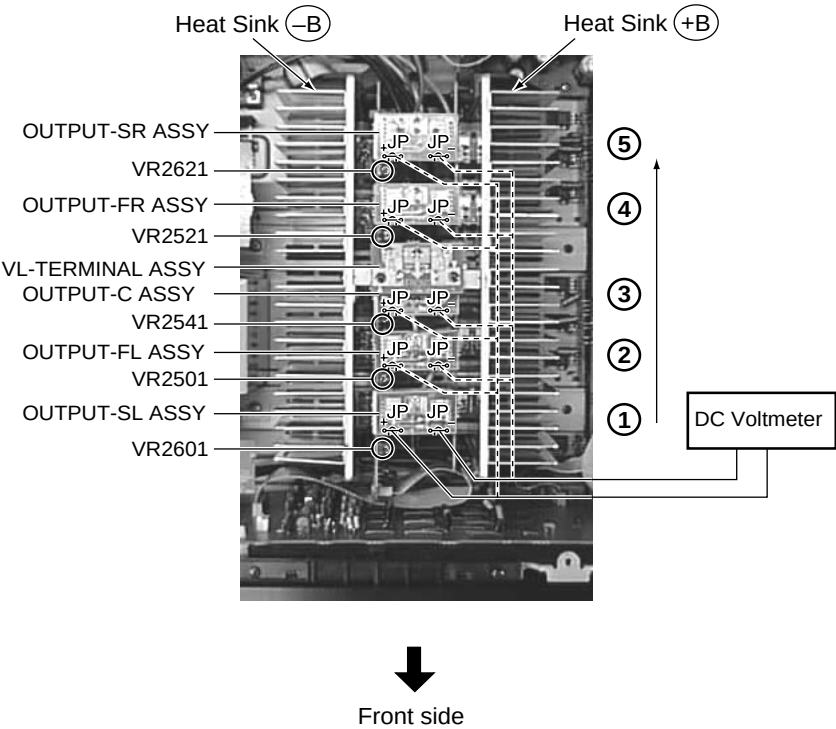
CN8001	13P FFC CONNECTOR	HLEM13S-1
CN8003	9P FFC CONNECTOR	HLEM9S-1
8001	SCREW TERMINAL	VNE1948

6. ADJUSTMENT

6.1 IDLE CURRENT ADJUSTMENT

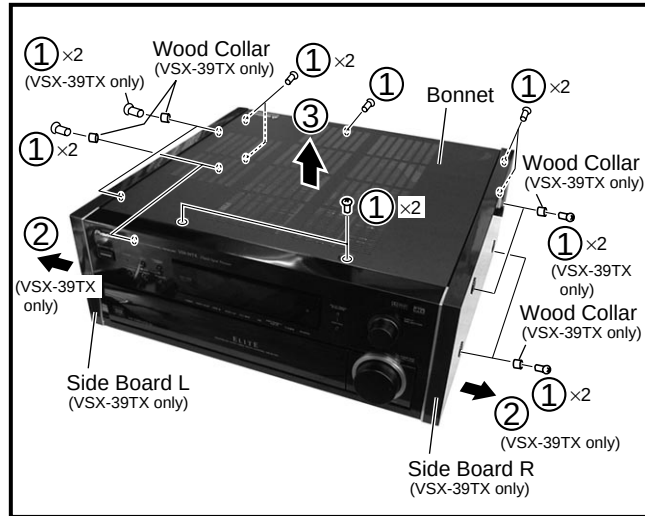
- **CAUTION** : Heatsink's DC level is equal to +B or -B.
Don't touch them or you will be electricary shocked.
1. Decrease the level of the Adjustment Variable resistors (VR) for the channel to be adjusted. (Turn counterclockwise.)
 2. Set the power switch to ON.
 3. Connect the DC voltmeter as shown below and adjust VRs in step No. order so that voltages become $16\text{mV}^{+4\text{mV}}_{-0\text{mV}}$.
 4. Ages for seven minutes.
 5. Readjust in step No. order so that the voltages become $11.5\text{mV} \pm 1\text{mV}$ (10.5 to 12.5mV). Adjustment is completed.

Step No.	Adjustment VR	Adjustment ch
1	VR2601	SL ch
2	VR2501	FL ch
3	VR2541	C ch
4	VR2521	FR ch
5	VR2621	SR ch

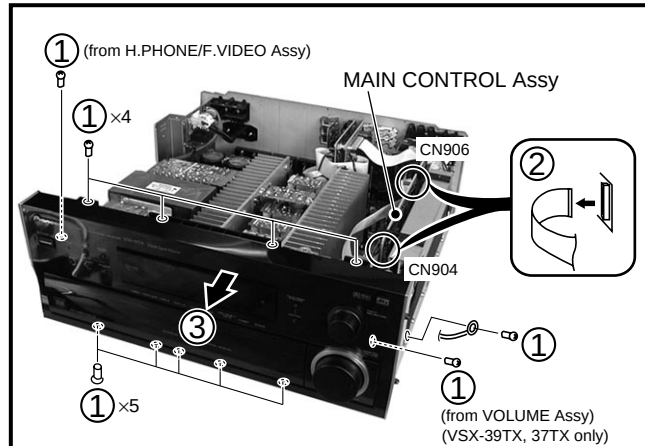


7.1 DISASSEMBLY

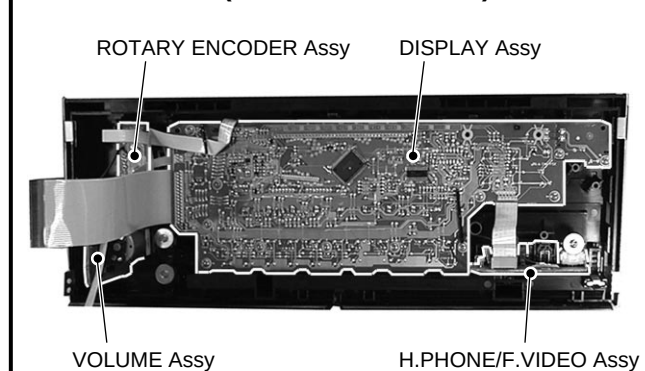
■ **Bonnet**



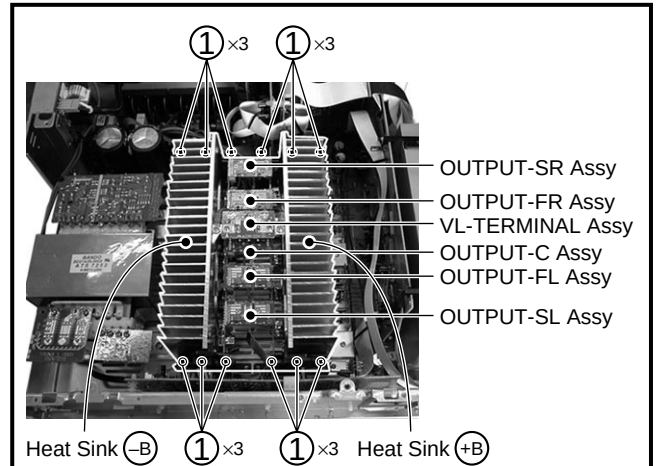
■ Front Panel Section



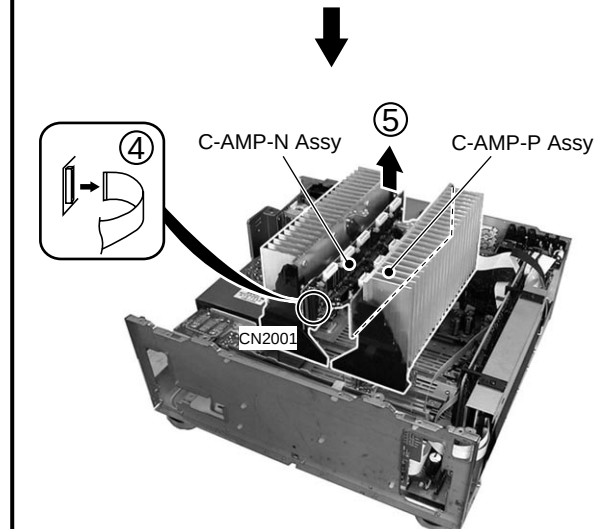
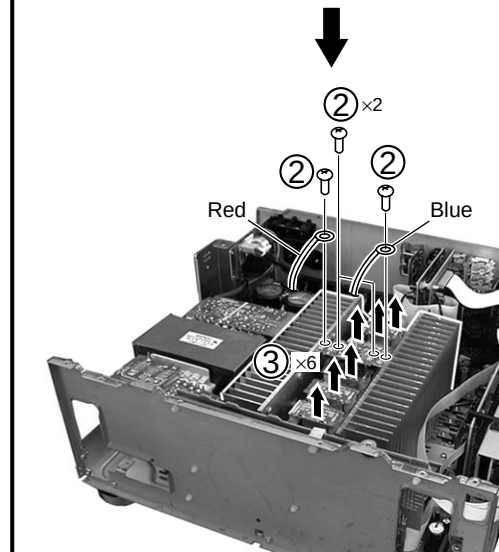
- **PCB Location (Front Panel Section)**



■ Heat Sink Section

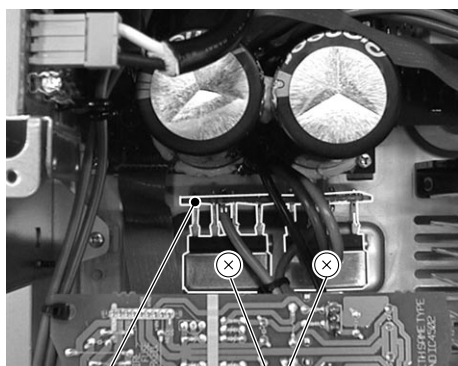


- **CAUTION** : Heatsink's DC level is equal to +B or - B. Don't touch them or you will be electricary shocked.



DIODE and REGULATOR Assemblies

• DIODE Assy



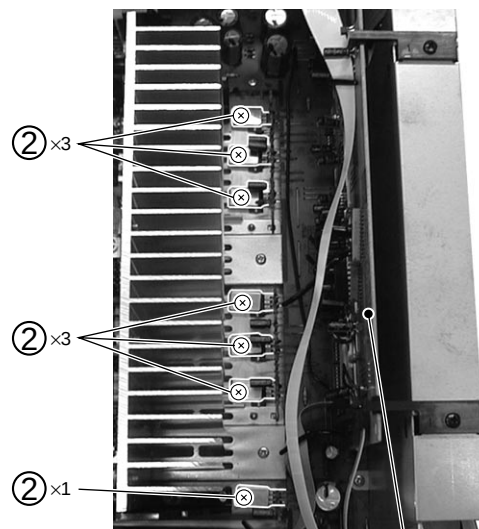
DIODE Assy

① x2

Replace the diode.



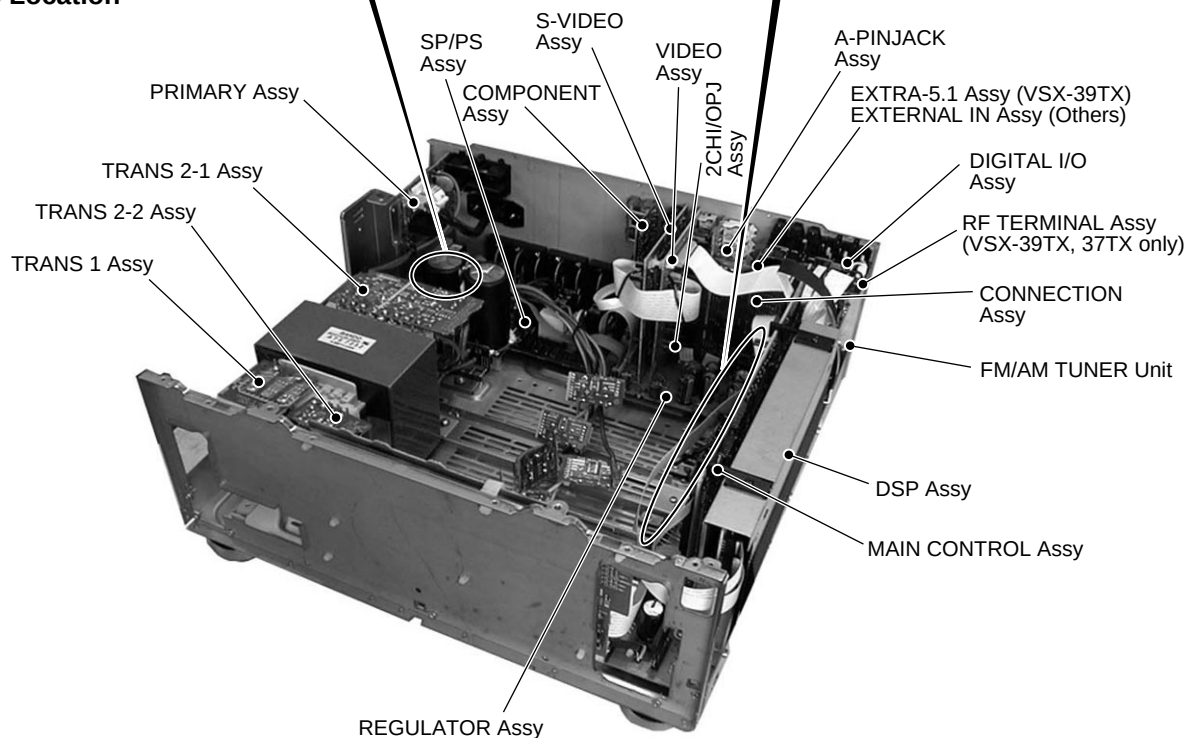
• REGULATOR Assy



REGULATOR Assy

Replace the Regulator IC.

• PCB Location



7.2 PARTS

7.2.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

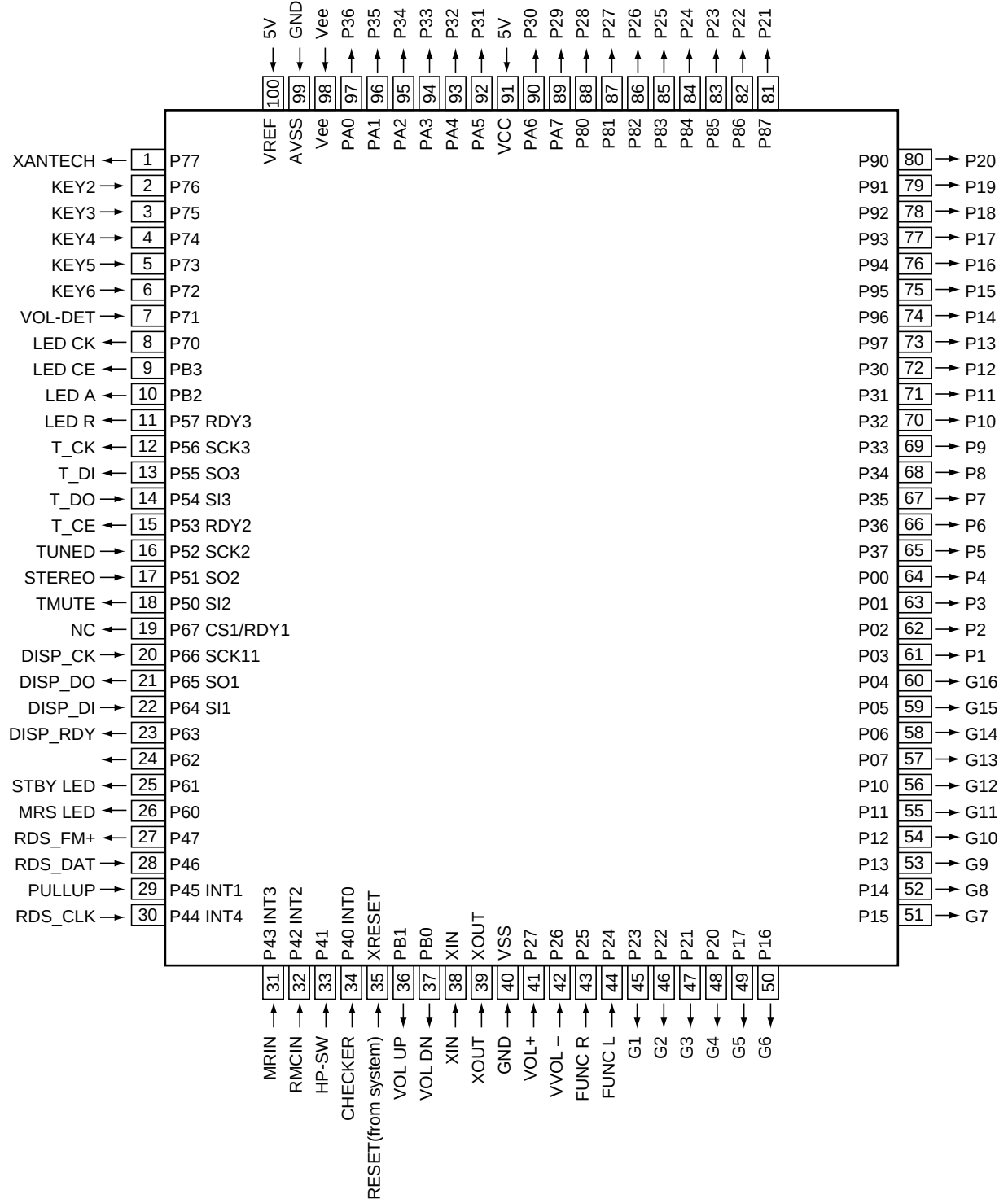
- List of IC

PD5595A, PD5589A

■ PD5595A (DISPLAY ASSY : IC7001)

- **Display Control IC**

- ### ● Pin Assignment (Top View)



VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

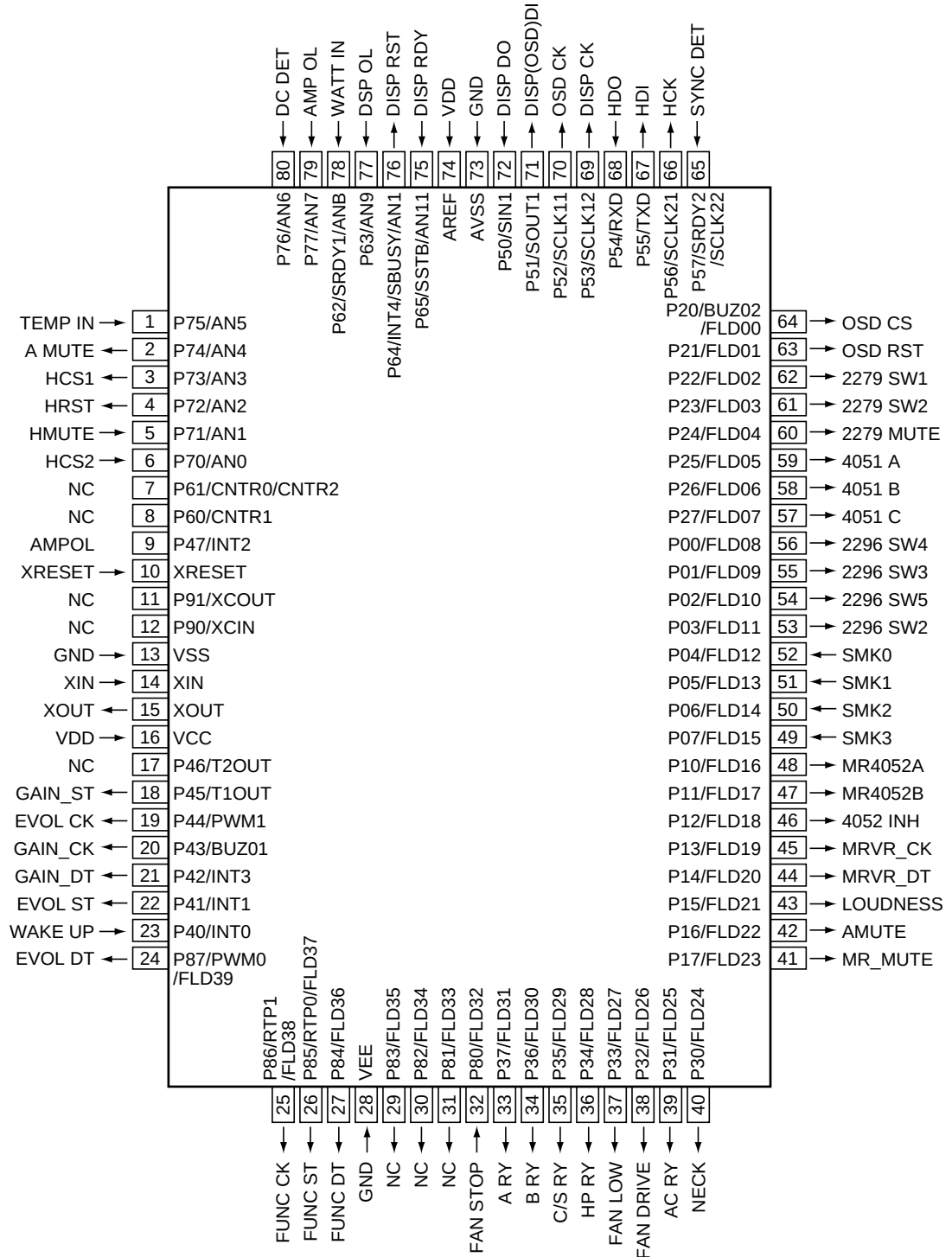
● Pin Function

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	XANTECH	O	XANTECH ON/OFF	51	G7	O	Grid output 7
2	KEY 2	I	Key scan input 2	52	G8	O	Grid output 8
3	KEY 3	I	Key scan input 3	53	G9	O	Grid output 9
4	KEY 4	I	Key scan input 4	54	G10	O	Grid output 10
5	KEY 5	I	Key scan input 5	55	G11	O	Grid output 11
6	KEY 6	I	Key scan input 6	56	G12	O	Grid output 12
7	VOL-DET	I	Detection of volume position	57	G13	O	Grid output 13
8	LED CKL	O	Clock for IC7071 M66311	58	G14	O	Grid output 14
9	LED OE	O	Output enable for IC7071 M66311	59	G15	O	Grid output 15
10	LED A	O	Data for IC7071 M66311	60	G16	O	Grid output 16
11	LED R	O	Reset for IC7071 M66311	61	S1	O	Segment output 1
12	T-CK	O	Clock for tuner module	62	S2	O	Segment output 2
13	T-DI	O	Data for tuner module	63	S3	O	Segment output 3
14	T-DO	I	Data from tuner module	64	S4	O	Segment output 4
15	T-CE	O	Chip enable for tuner module	65	S5	O	Segment output 5
16	TUNED	I	Tuned data from tuner module	66	S6	O	Segment output 6
17	STEREO	I	Stereo tuned data from tuner module	67	S7	O	Segment output 7
18	T-MUTE	O	Tuner mute ON/OFF	68	S8	O	Segment output 8
19	NC	O	Open	69	S9	O	Segment output 9
20	DISP CK	I	Clock from IC901 MAIN U-COM	70	S10	O	Segment output 10
21	DISP DO	O	Data for IC901 MAIN U-COM	71	S11	O	Segment output 11
22	DISP DI	I	Data from IC901 MAIN U-COM	72	S12	O	Segment output 12
23	DISP RDY	O	Data request for IC901 MAIN U-COM	73	S13	O	Segment output 13
24	NC	–	Open	74	S14	O	Segment output 14
25	STBY LED	O	Standby LED	75	S15	O	Segment output 15
26	MRS LED	O	Sub room LED (MR&S model), EON LED (RDS model)	76	S16	O	Segment output 16
27	RDS FM+	–	VDD for IC7401 BU1923 (RDS model only)	77	S17	O	Segment output 17
28	RDS DAT	O	Data for IC7401 BU1923 (RDS model only)	78	S18	O	Segment output 18
29	NC	I	(pull-up)	79	S19	O	Segment output 19
30	RDS CLK	I	Clock for IC7401 BU1923 (RDS model only)	80	S20	O	Segment output 20
31	MR IN	I	Sub room remote control (MR&S, MR model only)	81	S21	O	Segment output 21
32	RMC IN	I	Remote control	82	S22	O	Segment output 22
33	HP-SW	I	Headphone connect detect	83	S23	O	Segment output 23
34	NC	I	For unit check test mode detection	84	S24	O	Segment output 24
35	RESET	I	Reset	85	S25	O	Segment output 25
36	VOL/UP	O	Control for VOIL UP	86	S26	O	Segment output 26
37	VOL/DN	O	Control for VOL DOWN	87	S27	O	Segment output 27
38	XIN	–	Connect a 7.2MHz oscillator	88	S28	O	Segment output 28
39	XOUT	–		89	S29	O	Segment output 29
40	VSS	–	GND	90	S30	O	Segment output 30
41	VOL+	I	Rotary encoder signal +	91	VCC	–	Power supply +5V
42	VOL-	I	Rotary encoder signal -	92	S31	O	Segment output 31
43	FUNC/R	I	Rotary encoder signal R	93	S32	O	Segment output 32
44	FUNC/L	I	Rotary encoder signal L	94	S33	O	Segment output 33
45	G1	O	Grid output 1	95	S34	O	Segment output 34
46	G2	O	Grid output 2	96	S35	O	Segment output 35
47	G3	O	Grid output 3	97	S36	O	Segment output 36
48	G4	O	Grid output 4	98	VEE	–	Power supply 5V
49	G5	O	Grid output 5	99	AVSS	–	GND
50	G6	O	Grid output 6	100	VREF	–	Reference voltage 5V

■ PD5589A (MAIN CONTROL ASSY : IC901)

• Main Control IC

• Pin Assignment (Top View)



VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

● Pin Function

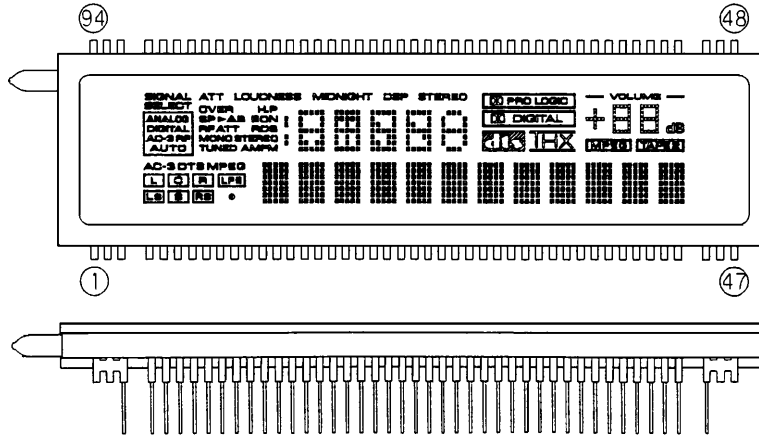
No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	TEMP IN	I/O	O/open (KU,J,SD), I/Fan temperature A/D input (other)	41	MR MUTE	O	Audio mute ON/OFF for sub room (MR&S, MR model only)
2	A MUTE	O	Audio mute ON/OFF	42	A MUTE2	O	Audio preout mute ON/OFF
3	DSP CS1	O	Chip select for IC9501 DSP U-COM	43	LOUD	O	Loudness ON/OFF
4	DSP RST	O	Reset for IC9501 DSP U-COM	44	MR-V DT	O	Data for IC110 M62429FP control (MR&S model only)
5	DSP MUTE	I	Mute request from IC9501 DSP U-COM	45	MR-V CK	O	Clock for IC110 M62429FP control (MR&S model only)
6	DSP CS2	I	Chip select from IC9501 DSP U-COM	46	4052 INH	O	Inhibit for IC102 BU4052BCF control (MR&S model only)
7	NC	O	Open	47	4052 B	O	Control for IC102 BU4052BCF (MR&S model only)
8	NC	O	Open	48	4052 A		
9	AMPOL	I	Amp Overload detect	49	SIMUKE 3	I	SIMUKE (pull-up or down)
10	RESET	I	Reset	50	SIMUKE 2		
11	NC	O	Open	51	SIMUKE 1		
12	NC	O	Open	52	SIMUKE 0		
13	GND	–	GND	53	2296-2	O	Control for IC701, 801, 802 NJM2296M
14	XIN	I	Connect a 4.19MHz oscillator	54	2296-5		
15	XOUT	O		55	2296-3		
16	VDD	–	Power supply +5V	56	2296-4		
17	NC	O	Open	57	4051-C	O	Control for IC831 BU4051BCF
18	ST3	O	Strobe for IC107 TC9163F control	58	4051-B		
19	CK2	O	Clock for IC108 TC9482N control	59	4051-A		
20	CK3	O	Clock for IC107 TC9163F control	60	2279-M	O	Control for IC731 NJM2279M (MR&S model only)
21	DT3	O	Data for IC107 TC9163F control	61	2279-2		
22	ST2	O	Strobe for IC108 TC9482N control	62	2279-1		
23	W.UP	I	AC pulse input	63	OSD RST	O	Reset for IC752 LC74782M-9011
24	DT2	O	Data for IC108 TC9482N control	64	OSD CS	O	Chip select for IC752 LC74782M-9011
25	CK1	O	Clock for IC101 TC9274N and IC104 TC9163F control	65	SYNC DET	I	Detection of synchronizing signal
26	ST1	O	Strobe for IC101 TC9274N and IC104 TC9163F control	66	DSP HCK	O	Clock for IC9501 DSP U-COM
27	DT1	O	Data for IC101 TC9274N and IC104 TC9163F control	67	DSP HDI	O	Data for IC9501 DSP U-COM
28	GND	–	GND	68	DSP HDO	I	Data from IC9501 DSP U-COM
29	NC	O	Open	69	DISP CK	O	Clock for IC7001 DISP U-COM
30	NC	O	Open	70	OSD CK	O	Clock for IC752 LC74782M-9011
31	NC	O	Open	71	DISP DI	O	Data for IC7001 DISP U-COM
32	FAN STOP	I/O	O/Open (KU,J,SD), I/Fan stop detector (other)	72	DISP DO	I	Data from IC7001 DISP U-COM
33	A RY	O	SP A relay ON/OFF	73	GND	–	GND
34	B RY	O	SP B relay ON/OFF	74	VDD	–	Power supply +5V
35	C/S RY	O	SP C/S relay ON/OFF	75	DISP RDY	I	Data request from IC7001 DISP U-COM
36	HP RY	O	Headphone relay ON/OFF	76	DISP RST	O	Reset for IC7001 DISP U-COM
37	FAN LOW	O	Open (KU,J,SD), Fan low (other)	77	DSP OL	I	DSP overload detect, A/D input
38	FAN DRIVE	O	Open (KU,J,SD), Fan drive (other)	78	WATT IN	I/O	O/Open (KU,J,SD), I/Fan wattage input, A/D input (other)
39	AC RY	O	AC relay ON/OFF	79	AMP OL	I	Amp overload detect, A/D input
40	NECK	O	Neck ON/OFF (24,26,908,938 only)	80	DC DET	I	Detection of amp power error, A/D input

7.2.2 DISPLAY

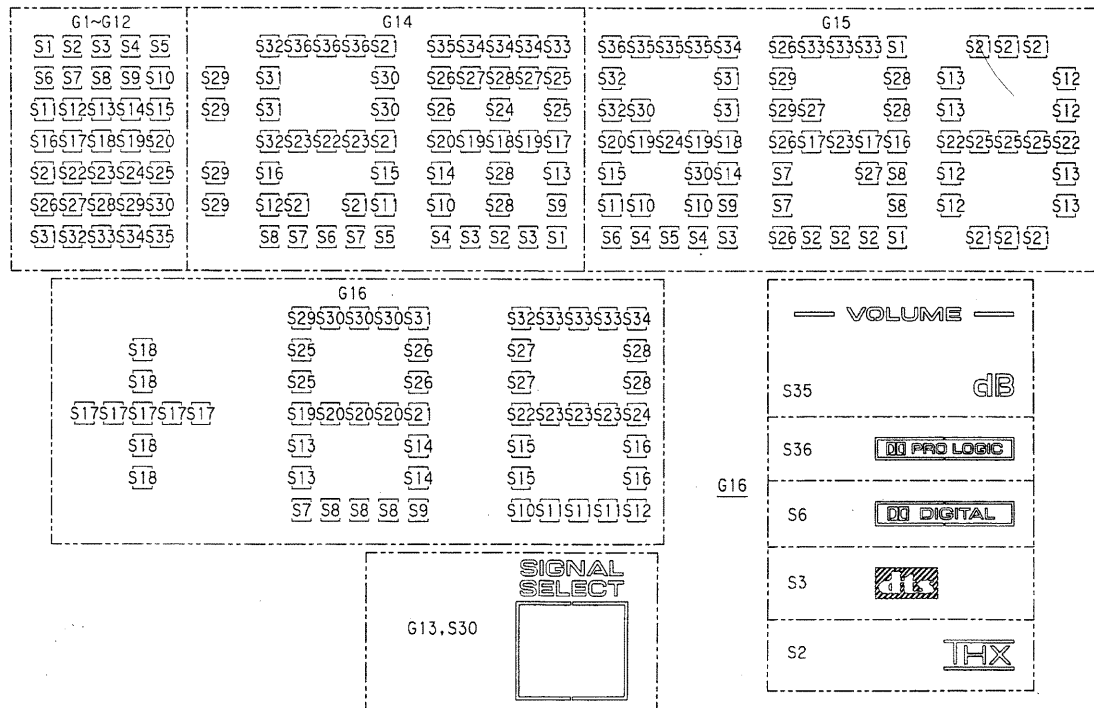
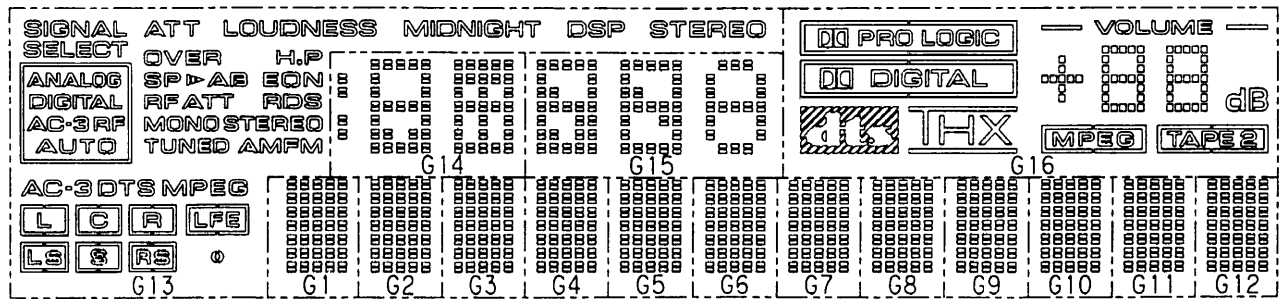
■ AAV7063 (DISPLAY ASSY :V7001)

- FL Indicator Tube

- Pin Assignment



- Grid Assignment



VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

● Anode and Grid Connection

	G1~G12	G13	G14	G15	G16		G1~G12	G13	G14	G15	G16		G1~G12	G13	G14	G15	G16
S1	S1		S1	S1		S13	S13	DTS	S13	S13	S13	S25	S25	H.P	S25	S25	S25
S2	S2	FM	S2	S2	S2	S14	S14	AC-3 (DTS)	S14	S14	S14	S26	S26	AUTO	S26	S26	S26
S3	S3	AM	S3	S3	S3	S15	S15	RFATT	S15	S15	S15	S27	S27	AC-3RF	S27	S27	S27
S4	S4	MPEG	S4	S4	TAPE2	S16	S16	EON	S16	S16	S16	S28	S28	DIGITAL	S28	S28	S28
S5	S5	LFE	S5	S5	MPEG	S17	S17	(▶)A(B)	S17	S17	S17	S29	S29	ANALOG	S29	S29	S29
S6	S6	STEREO	S6	S6	S6	S18	S18	(▶)A(B)	S18	S18	S18	S30	S30	S30	S30	S30	S30
S7	S7	TUNED	S7	S7	S7	S19	S19	Ⓢ	S19	S19	S19	S31	S31	ATT	S31	S31	S31
S8	S8	MONO	S8	S8	S8	S20	S20	LS	S20	S20	S20	S32	S32	LOUDNESS	S32	S32	S32
S9	S9	R	S9	S9	S9	S21	S21	S	S21	S21	S21	S33	S33	MIDNIGHT	S33	S33	S33
S10	S10	C	S10	S10	S10	S22	S22	RS	S22	S22	S22	S34	S34	DSP	S34	S34	S34
S11	S11	L	S11	S11	S11	S23	S23	SPD▶	S23	S23	S23	S35	S35	(DSP) STEREO	S35	S35	S35
S12	S12	RDS	S12	S12	S12	S24	S24	OVER	S24	S24	S24	S36			S36	S36	S36

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assignment	NL	NL	F1	NP	D	IC	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Assignment	NL	NL	S36	S35	S34	S33	S32	S31	S30	S29	NL	NL	NL	S28	S27	S26	S25	S24	H	NP	F2	NL	NL

Pin No.	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
Assignment	NL	NL	NL	NP	S23	S22	S21	S20	S19	S18	S17	S16	S15	S14	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4

Pin No.	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Assignment	S3	S2	S1	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	NP	NL	NL	NL

F1, F2 : Filament G1 to G16 : Grid S1 to S36 : Anode D : External connect to F1 NP: No Pin NL : Lead
H : Power supply grid usually (ec level = Apply Typ 35.0 VDC) IC : Internal connection

7.3 REMOTE CONTROL UNIT

7.3.1 AXD7254 (for VSX-39TX)

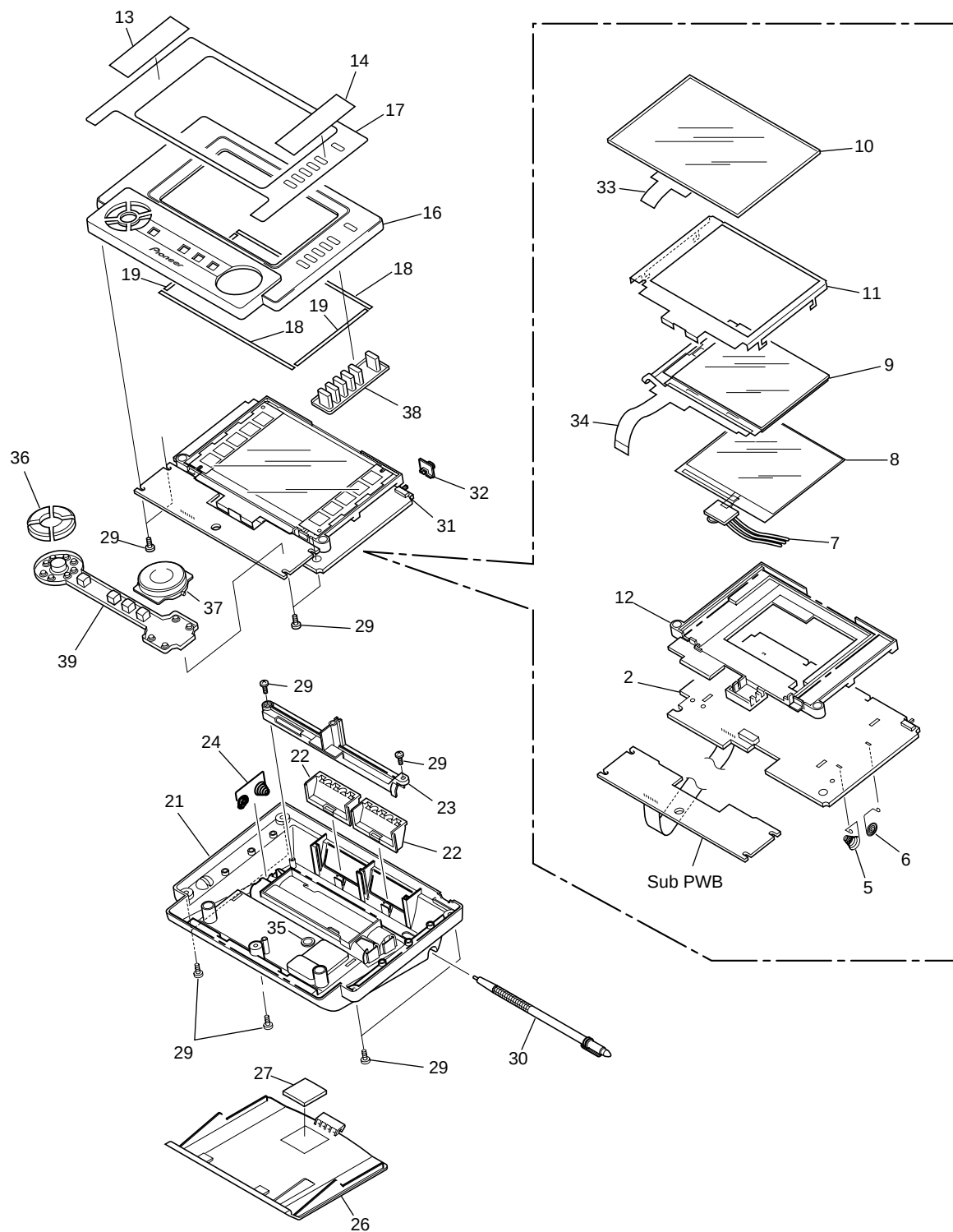
7.3.1.1 EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

- The $\triangle$ mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

- Screws adjacent to ▼ mark on the product are used for disassembly.



● PARTS LIST

Mark	No.	Description	Part No.
	1		
	2	PCB Assy	AZC7298
	3		
	4		
	5	Terminal A	411RRC15801R
	6	Terminal B	411RRC15901R
	7	Jumper Cable	E-AA1446-001
	8	EL Module	AZC7294
	9	LCD Module	AZC7295
	10	Touch Panel	NTX01005701R
	11	Frame	501RRC01901R
	12	LCD Holder	AZN7787
	13	Seal A	AZA7367
	14	Seal B	AZA7368
	15		
	16	Case A	AZN7840
	17	Name Plate	AZA7393
	18	Cushion A	701RRC04801R
	19	Cushion B	701RRC04901R
	20		
	21	Case B	AZN7784
	22	Filter	AZA7343
	23	Pen Holder	AZN7786
	24	Terminal	413RRC11201R
	25		
	26	Battery Cover	AZN7785
	27	Cushion C	701RRC03501R
	28		
	29	Screw	AZB7144
	30	Touch Pen	E-AA1445-001
	31	Slide Switch	JSB1220-0111
	32	Slide Knob	AZA7347
	33	FPC Connector	CFP5519-0101
	34	FPC Connector	E-CP0535-008
	35	MT Switch	JPM1030-0801
	36	Key Top A	AZA7345
	37	Key Top B	AZA7346
	38	Rubber Sheet A	AZA7348
	39	Rubber Sheet B	AZA7349

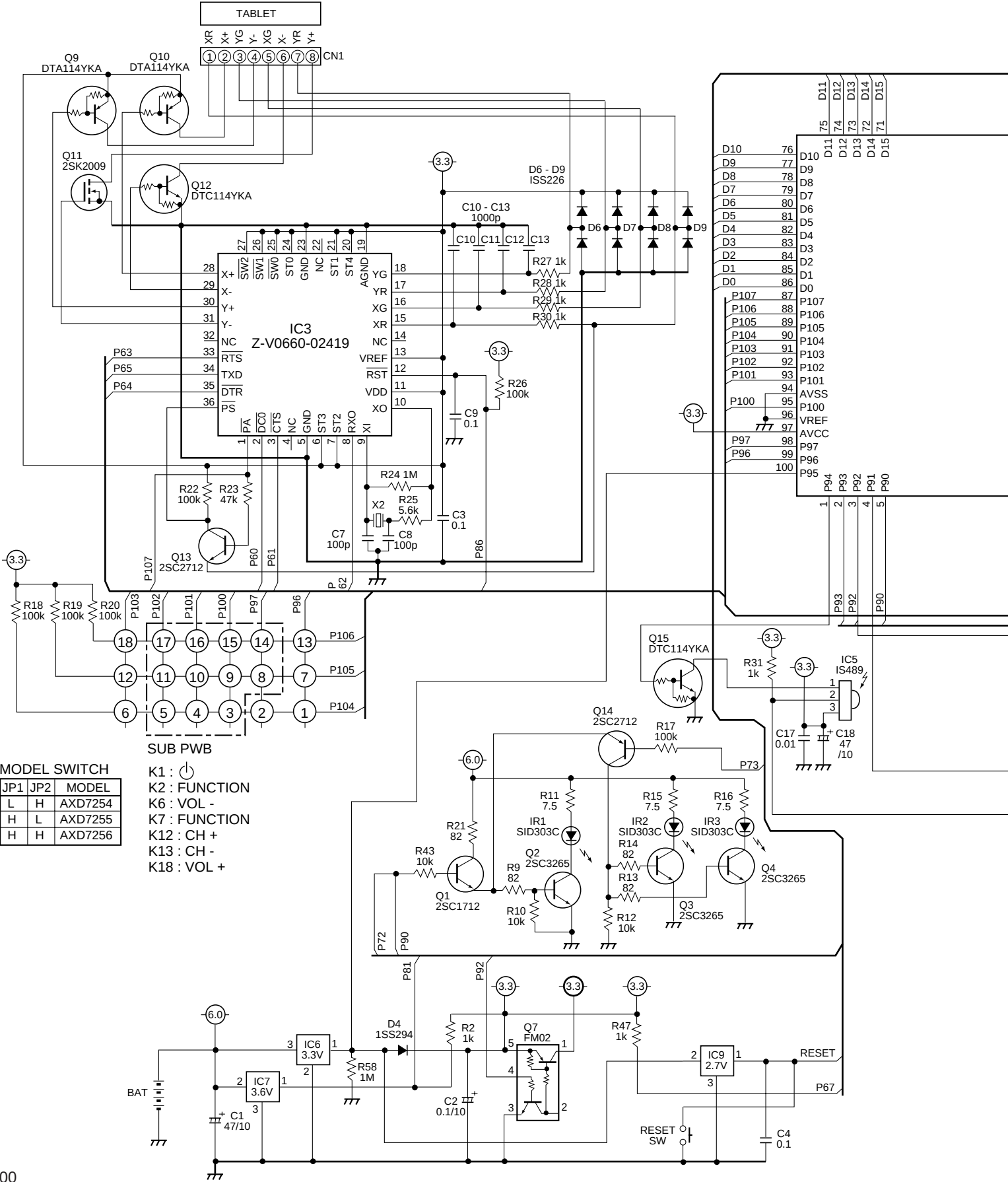
7.3.1.2 SCHEMATIC DIAGRAM

A

B

C

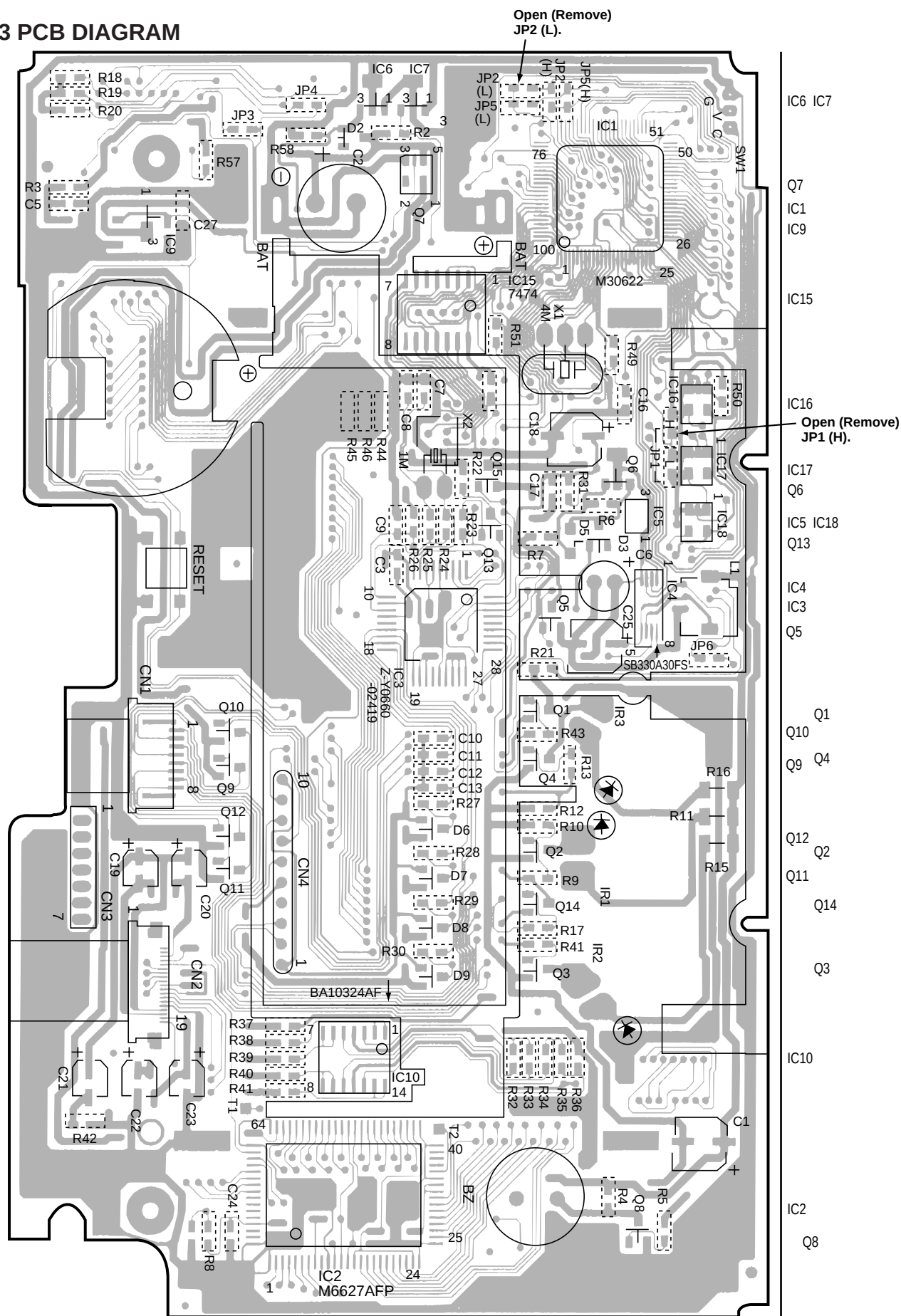
D

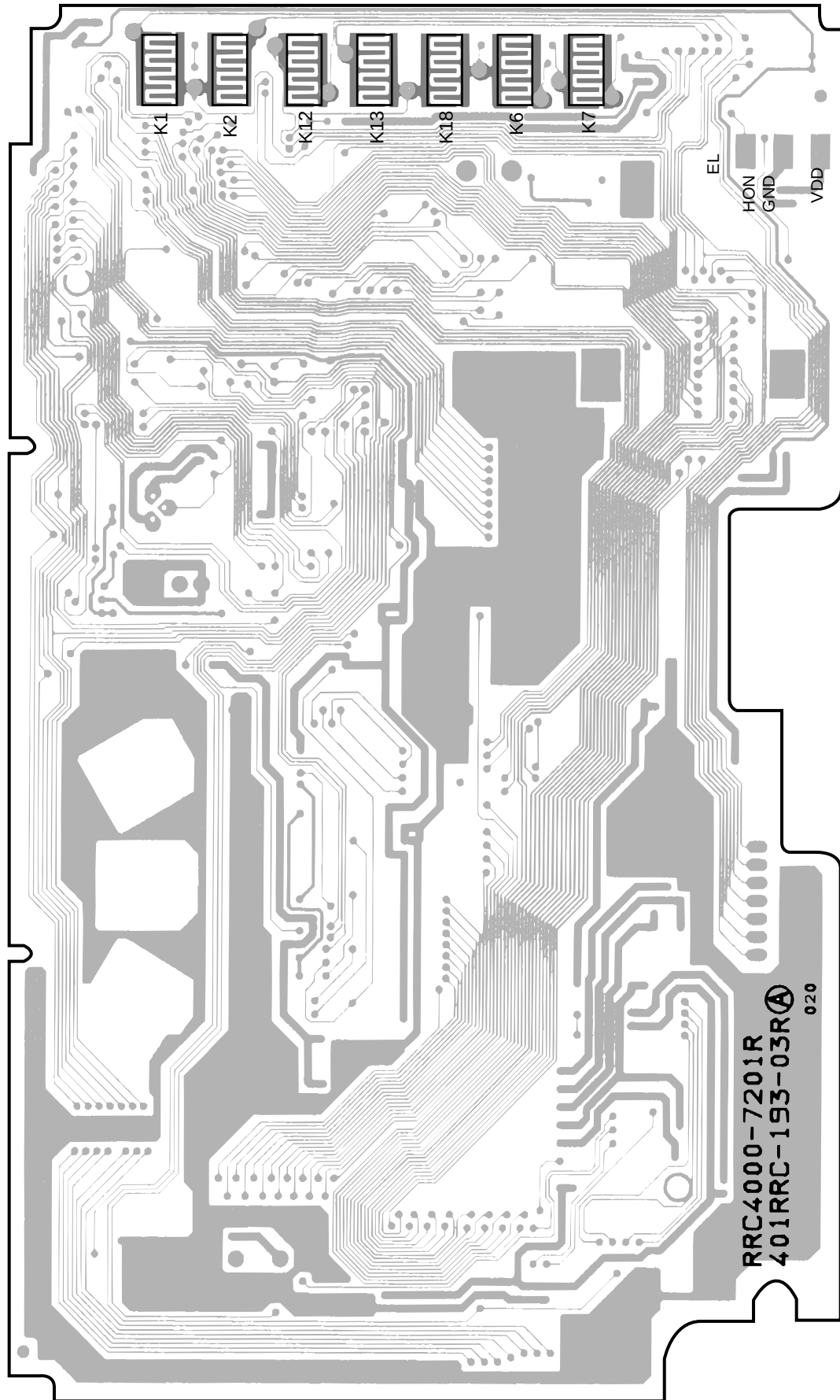


A



7.3.1.3 PCB DIAGRAM



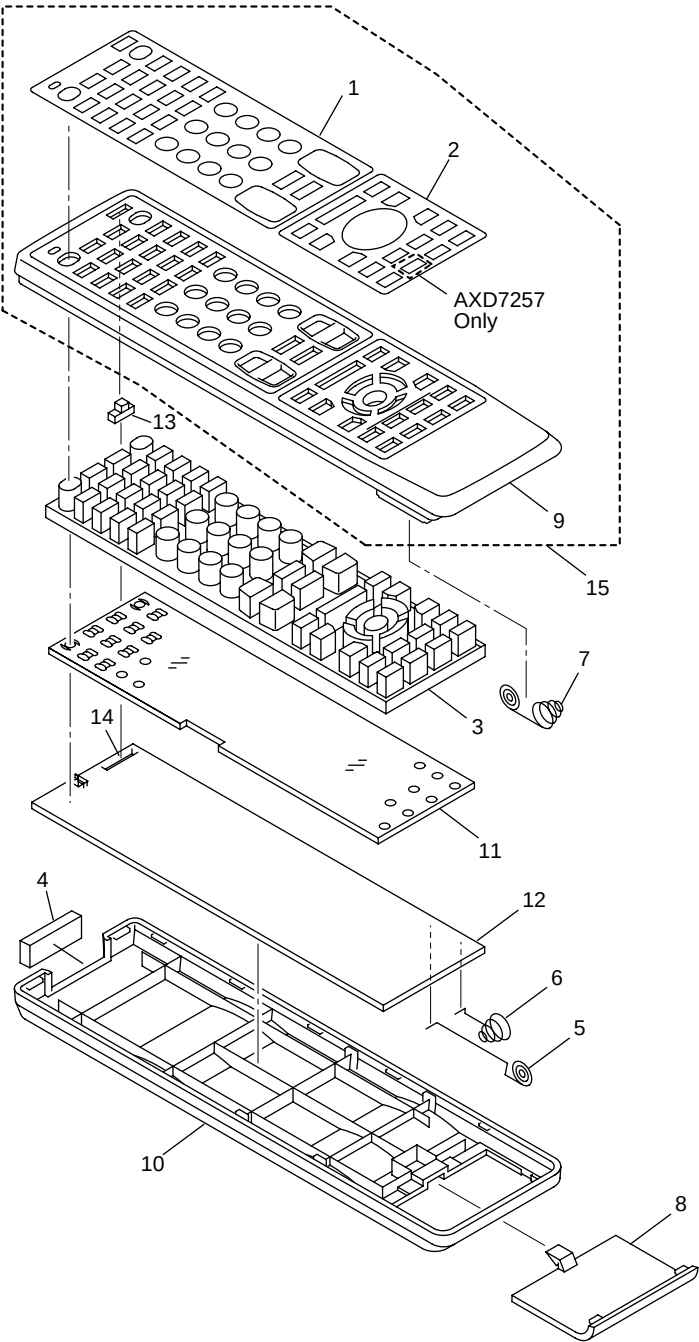


SIDE B

7.3.2 AXD7257 (Remote Control 37) and AXD7278 (Remote Control 909S)

7.3.2.1 EXPLODED VIEWS AND PARTS LIST

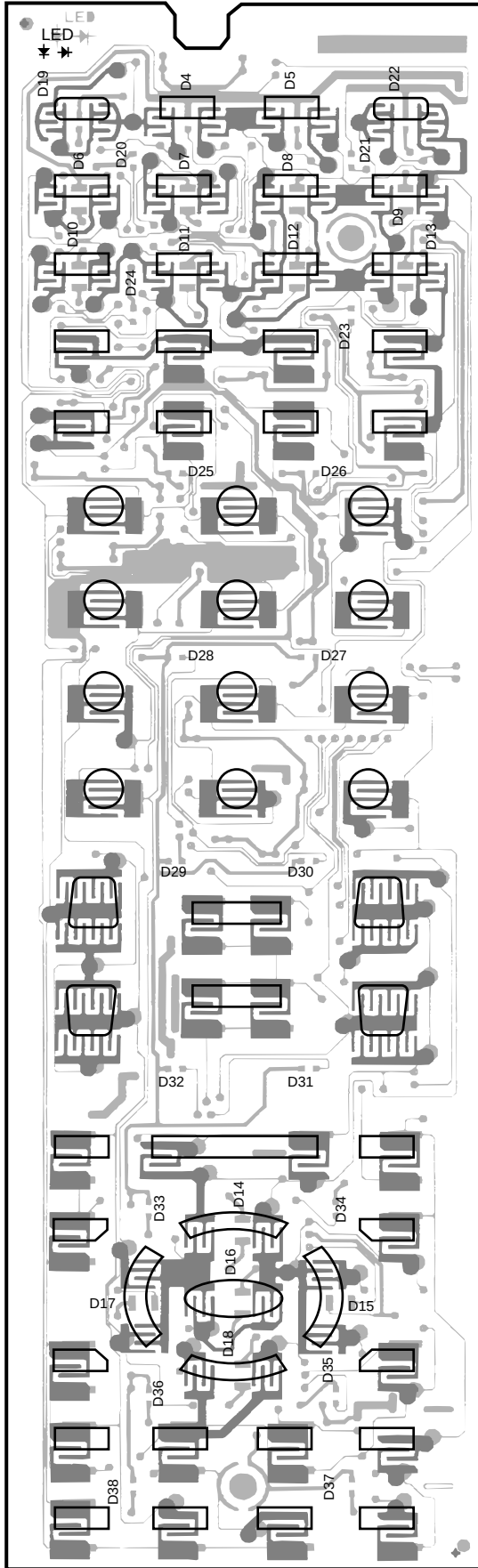
- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screws adjacent to  mark on the product are used for disassembly.



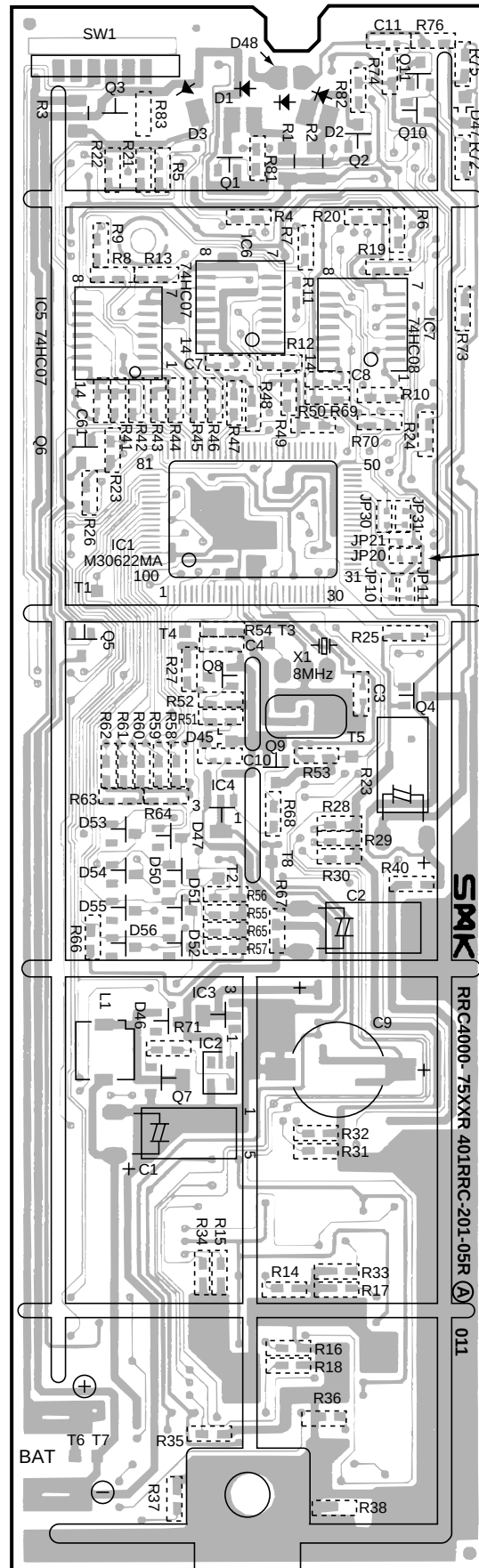
● PARTS LIST

Mark	No.	Description	Part No.
	1	Name Plate A	AZA7380
	2	Name Plate B (AXD7257)	AZA7381
	2	Name Plate B (AXD7278)	AZA7386
	3	Rubber Sheet (AXD7257)	AZA7382
	3	Rubber Sheet (AXD7278)	AZA7387
	4	Filter	AZA7340
	5	Terminal A (+)	AZB7141
	6	Terminal B (-)	AZB7142
	7	Spring	AZB7143
	8	Battery Cover	AZN7841
	9	Case (A)	AZN7832
	10	Case (B)	AZN7781
NSP	11	Illumi Plate	AZN7782
	12	PCB	AZW7260
	13	Knob	AZA7398
	14	Slide Switch	AZS7036
	15	Case A assy : 7257	AZN7846
	15	Case A assy : 7278	AZN7847

7.3.2.2 PCB DIAGRAM

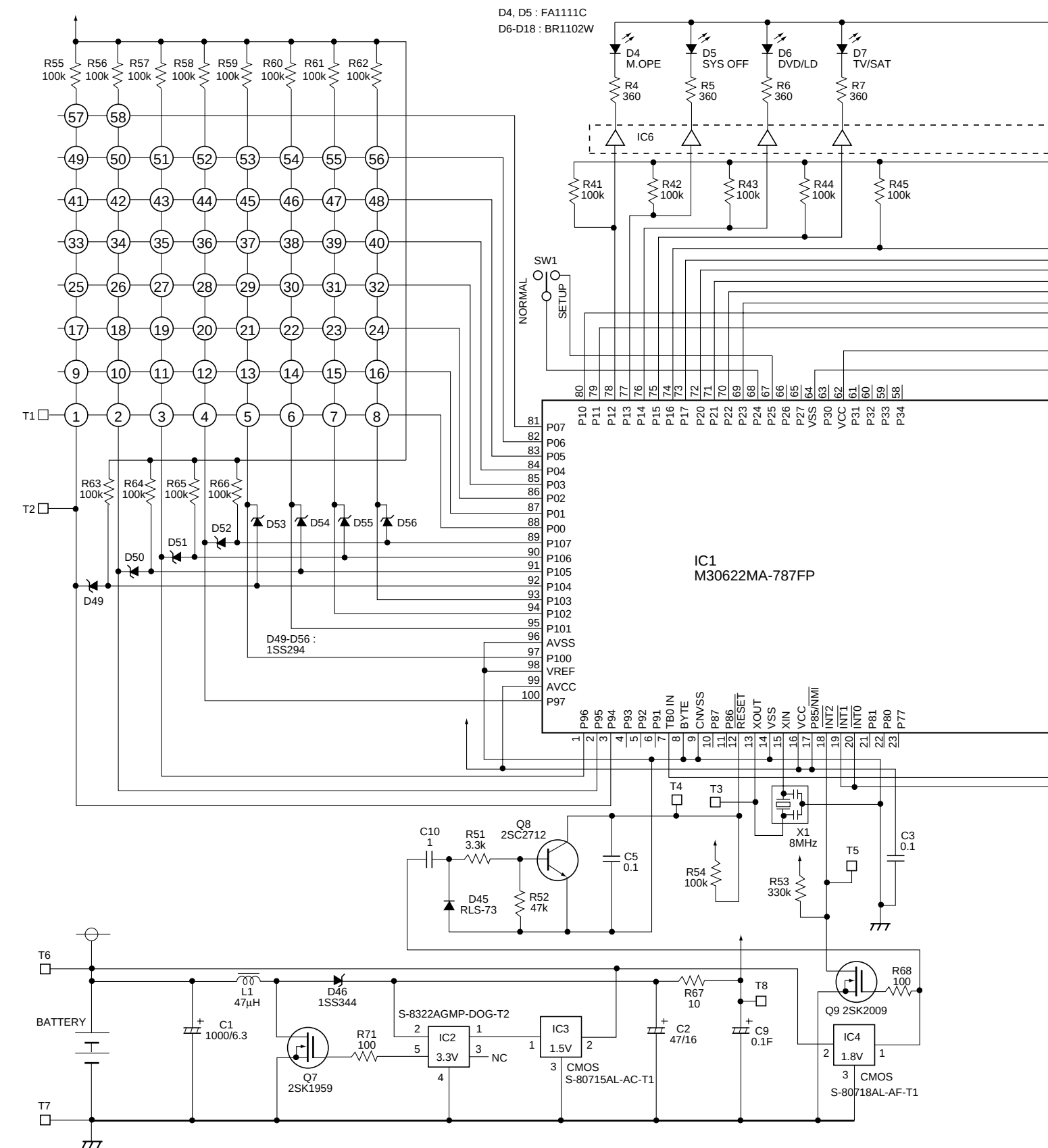


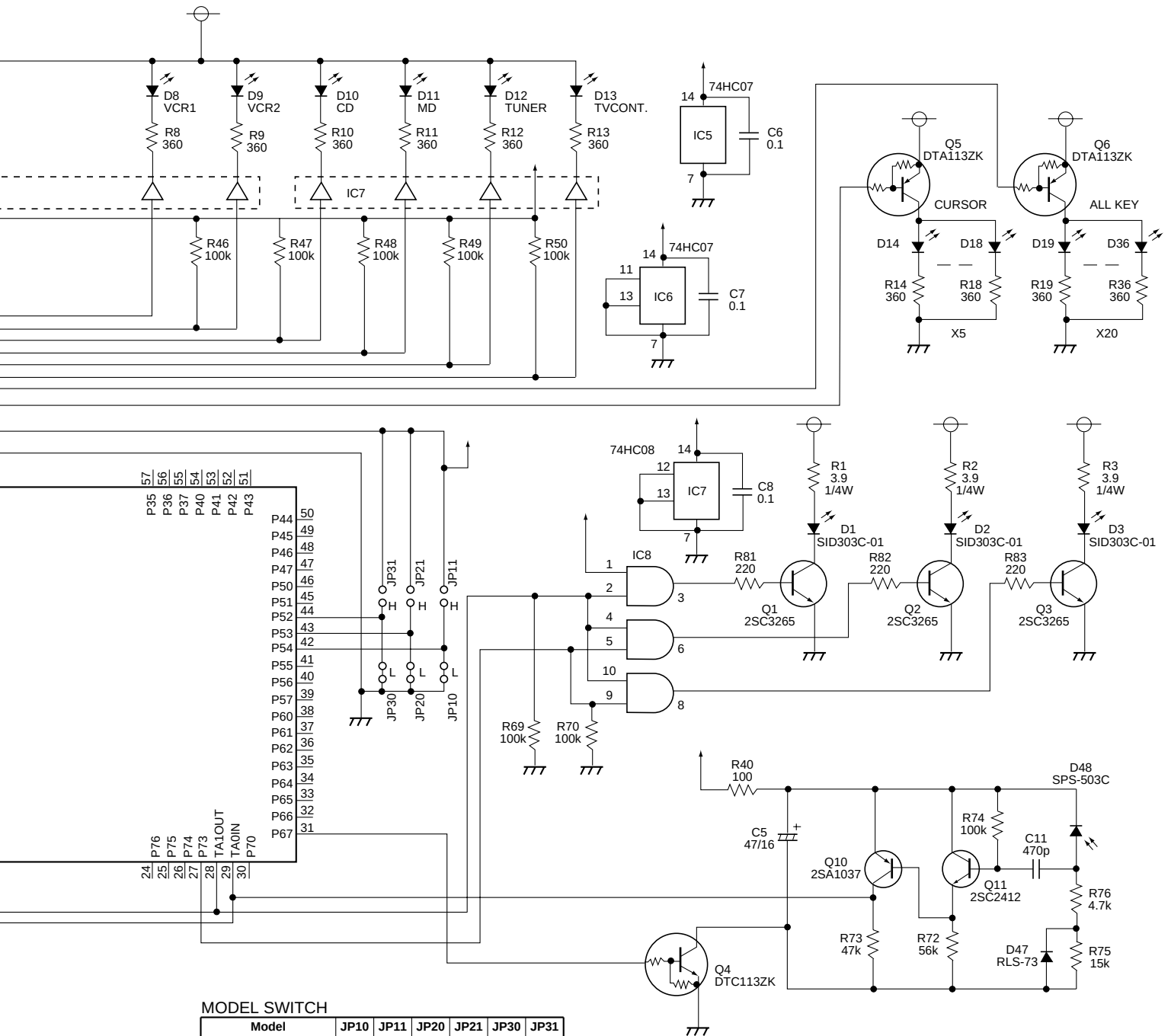
SIDE A



SIDE B

7.3.2.3 SCHEMATIC DIAGRAM





7.3.2.4 PCB PARTS LIST

NOTES: ●The Δ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

●When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU 561 J

47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU 473 J

0.5 Ω $\rightarrow$ R50 RN2H R50 K

1 Ω $\rightarrow$ 1R0 RS1P 1R0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC 5621 F

Mark	No.	Description	Part No.
	IC1		M30622MA-787FP
	IC2		S-8322AGMP-DOG-T2
	IC3		S-80715AL-AC-T1
	IC4		S-80718AL-AF-T1
	IC5,IC6		74HC07
	IC7		74HC08
	Q1-Q3		2SC3265
	Q4		DTC113ZK
	Q5,Q6		DTA113ZK
	Q7		2SK1959
	Q8		2SC2712
	Q9		2SK2009
	Q10		2SA1037
	Q11		2SC2412
	D1-D3		SID303C-01
	D6-D18		BR1102W
	D23-D36		CL190TD-CD
	D45,D47		RLS-73
	D46		1SS344
	D48		SPS-503C
	D49-D56		1SS294

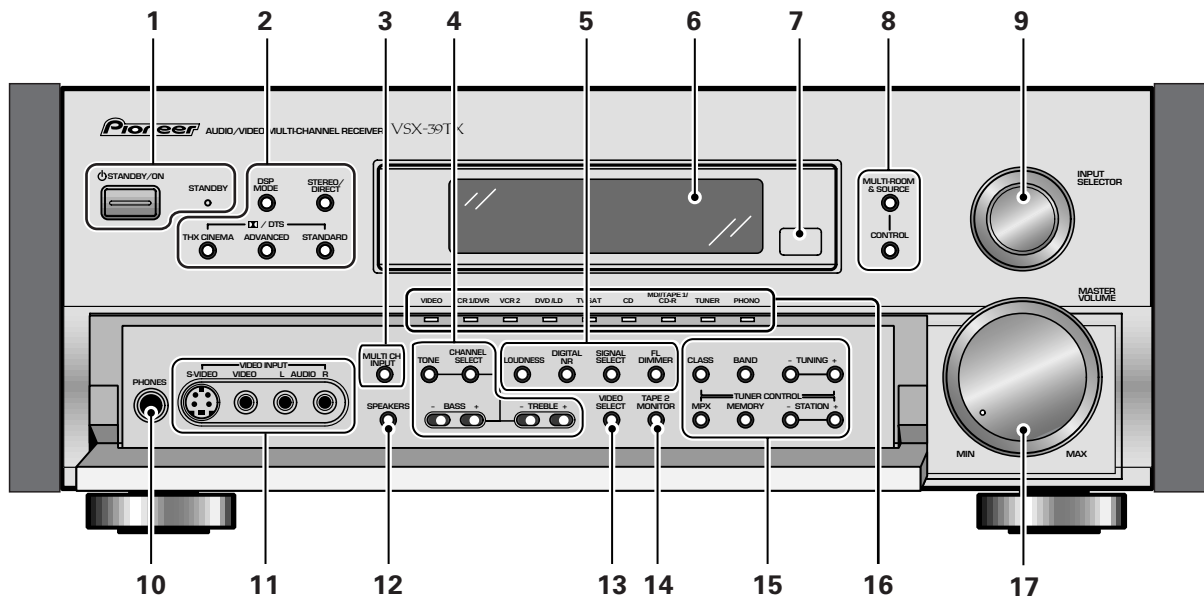
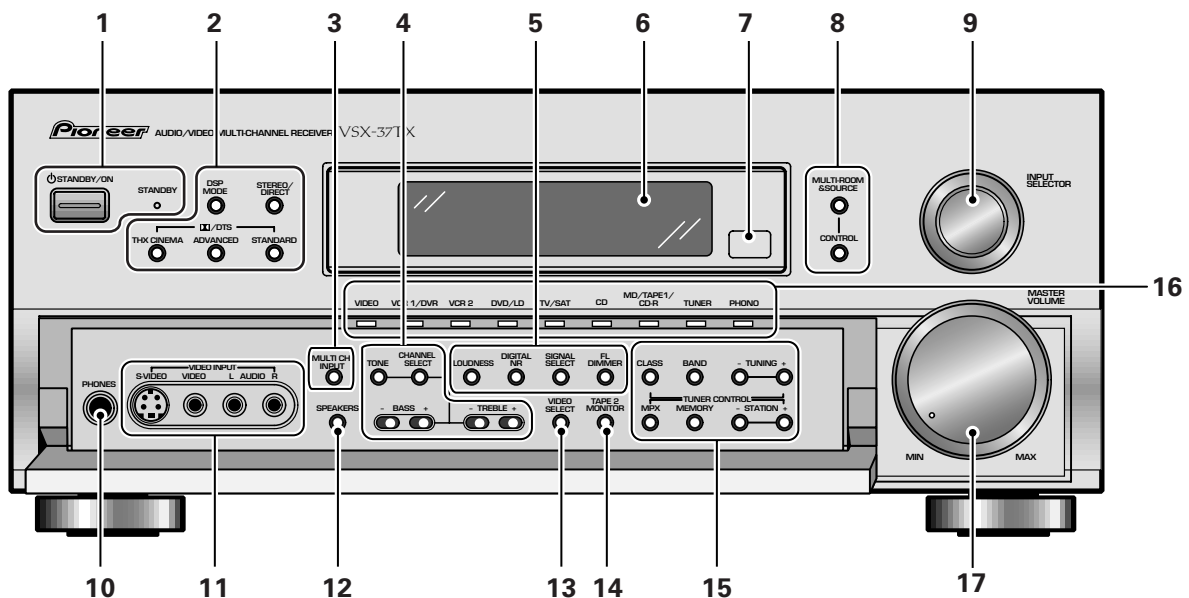
8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Section (VSX-39TX, VSX-37TX, VSX-36TX)

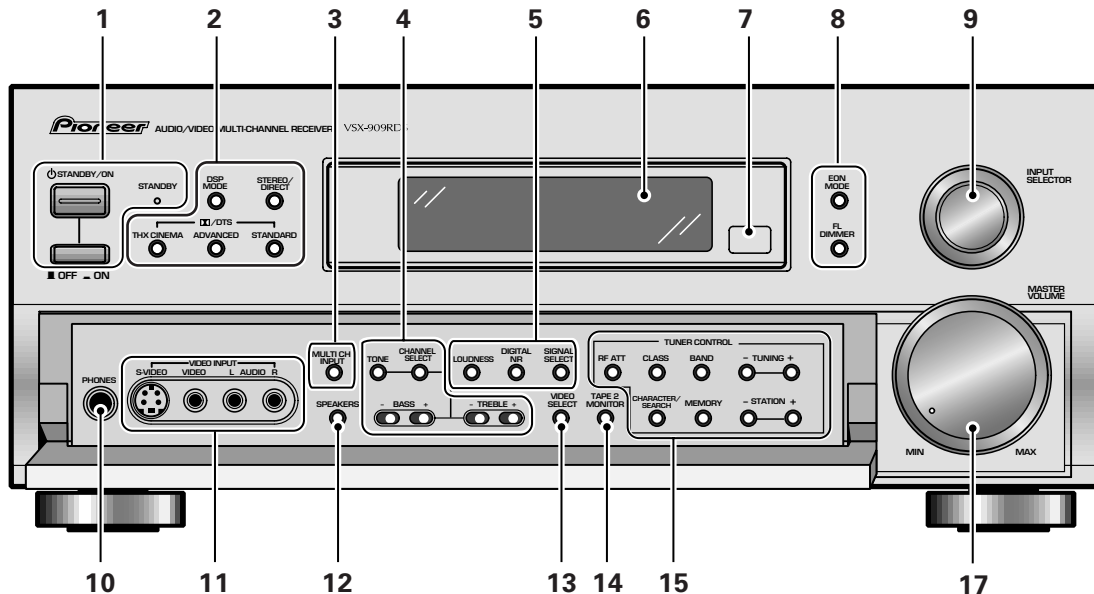
All the controls on the front panel are explained and/or referenced here. To open the front panel push gently on the lower third of the panel.

VSX-39TX

VSX-37TX
VSX-36TX

■ Front Section (VSX-D909S)

VSX-D909S



1 **STANDBY/ON button**

Press to switch the receiver ON or into STANDBY mode.

STANDBY indicator

Lights when the receiver is in STANDBY mode. (Please note that this receiver consumes a small amount of power [1.0 W] in the standby mode.)

2 **DSP MODE button**

Press repeatedly to select a DSP sound mode. (HALL 1, HALL 2, JAZZ, DANCE, THEATER 1, or THEATER 2, 5/7 CH STEREO). Use these modes to produce surround sound from standard (two channel) stereo sources and create different listening environments.

STEREO/DIRECT button

Switches the receiver into STEREO mode if it was in a different sound mode (like DSP mode) or toggles between DIRECT and STEREO mode. For more on STEREO mode .

DIRECT playback bypasses the tone controls, DIGITAL NR, LOUDNESS, MIDNIGHT and channel level for the most accurate reproduction of a program source.

THX CINEMA / DTS buttons

THX CINEMA – Cycles through the THX CINEMA, THX SURROUND EX or THX AUTO sound modes. If you have THX-certified speaker setup or want to re-create a THX-style sound environment. It is also appropriate for Dolby Digital, Dolby Pro Logic, DTS sources. Those with surround back speakers can use all three THX modes, those without can only use the THX CINEMA mode.

ADVANCED – Use to select one of the four Advanced Theater modes. Use to create certain types of sound environments when listening to Dolby Digital, Dolby Pro Logic, DTS sources.

STANDARD – Use for pure decoding of multi channel sources, especially Dolby Digital, Dolby Pro Logic, DTS sources. Each press toggles between STANDARD and STANDARD 7.1 mode (for use with SURROUND BACK speakers) and STANDARD auto (the receiver chooses the appropriate STANDARD mode). Those with surround back speakers can use all three STANDARD modes, those without can only use the STANDARD mode.

3 **MULTI CH INPUT**

Use to hook up an external component that can decode other types of signals and input them into the VSX-39TX.

4 **TONE control buttons**

TONE button

This button has two functions. Firstly, it switches between TONE ON and TONE BYPASS, which bypasses the tone circuitry. Secondly, you need to press the button before using the CHANNEL SELECT buttons to adjust the BASS & TREBLE (cannot be used in THX or MULTI CH IN modes).

CHANNEL SELECT button

Switches the tone adjust controls between the FRONT, CENTER, SURROUND and SURROUND BACK speakers. You can then use the BASS and TREBLE controls to adjust the sound.

BASS (-/+) button

Use to adjust low frequencies.

TREBLE (-/+) button

Use to adjust the high frequencies.

5 **LOUDNESS button**

Switches the LOUDNESS mode on or off (cannot be used in THX or MULTI CH IN modes).

DIGITAL NR button

Switches the DIGITAL NR on or off (cannot be used in THX or MULTI CH IN modes).

SIGNAL SELECT button

Use to select the type of signal being input into the receiver. Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG – To select an analog signal.

DIGITAL – To select an optical or coaxial digital signal.

AC-3 RF – To select an RF signal.

AUTO – This is the default. If there are analog, digital and RF signals input, the receiver automatically selects the RF signal. If there are analog and digital signals input the digital will be selected.

FL DIMMER button

Use to adjust the brightness of the main display.

6 Display

7 Remote sensor

Point the remote control toward the remote sensor to operate the receiver.

8 MULTI-ROOM & SOURCE button

Press to use the multi room feature (requires an optional PIONEER Multi-Room Remote Sensor Unit MR-100 or another IR receiver).

CONTROL button : Used together with the INPUT SELECTOR to select the function or use with the MASTER VOLUME to select the volume of the MULTI ROOM system.

9 INPUT SELECTOR dial

Turn to select a source component. (You can also use to select a function in the MULTI-ROOM & SOURCE mode). The source indicators show the current component:

DVD/LD – DVD player or Laser Disc player.

TV/SAT – TV or satellite tuner.

CD – Compact Disc player.

MD/TAPE1/CD-R – Tape deck, Mini Disc recorder or CD recorder connected to MD/TAPE 1/CD-R inputs/outputs.

TUNER – The receiver's built-in tuner.

PHONO – Turntable.

VIDEO – Video camera (etc.) connected to the VIDEO INPUT on the front panel.

VCR1/DVR – Video cassette recorder connected to VCR1/DVR inputs.

VCR 2 – Video cassette recorder or other component connected to VCR 2 inputs.

10 PHONES jack

Connect headphones for private listening (no sound will be heard through the speakers)

11 VIDEO INPUT jacks

S-VIDEO : Video input for connecting a video camera (etc.), that has an S-Video out.

VIDEO / AUDIO (L/R) : Video input for connecting a video camera, etc. that has standard video/audio outputs.

12 SPEAKERS (A/B) button

Use to select the speaker system. A is the primary setting. It plays all speakers hooked up to the A system. A & B setting only plays the front speakers of both the A & B systems and the subwoofer. Multi channel sources will be down-mixed to these Speakers so no sound will be lost. B setting only plays the front speakers connected to the B system and multi channel sources will be down-mixed to these two speakers. The button cycles through the speaker systems as follows: A⇒B⇒A&B⇒off.

13 VIDEO SELECT button

Switches the receiver between the various types of video input.

14 TAPE 2 MONITOR button

Selects the tape deck (MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/outputs. Allows monitoring of a recording as it's being made.

15 TUNER CONTROL buttons

CLASS – Press repeatedly to switch the preset station classes.

BAND – Press to select the AM or FM band.

TUNING -/+ – Use to manually tune to radio stations.

MPX – Press to switch between auto stereo and MONO reception of FM broadcasts. When the broadcast signal is weak, selecting MONO will improve the sound quality.

MEMORY – Press to start the memorization of a preset station.

STATION -/+ – Use to choose programmed radio stations.

16 Source indicators

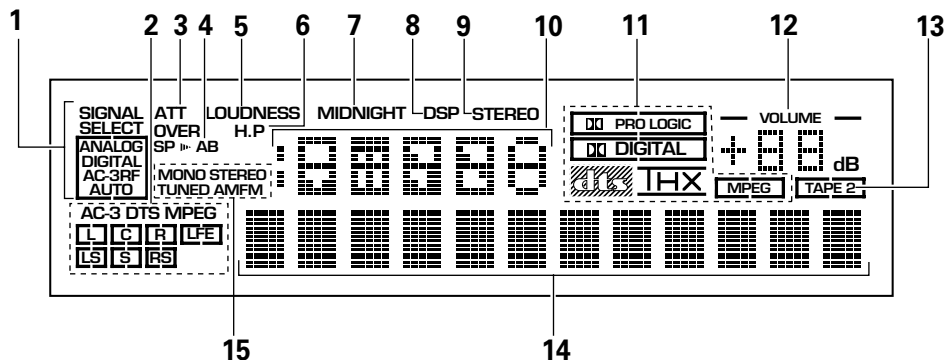
Shows the source currently selected.

17 MASTER VOLUME

Adjusts the overall receiver volume.

■ Display

All the display information is explained and /or referenced here.



1 SIGNAL SELECT indicators

Light to indicate the input signal you selected.

ANALOG : Lights when analog signals are assigned.

DIGITAL : Lights when digital audio signals are selected.

AC-3 RF : Lights when AC-3 RF signals are assigned.

AUTO : Lights when the receiver is set to select the input signal automatically.

2 Program Format indicators

AC-3 : Lights when a source with Dolby Digital signals is played.

DTS : Lights when a source with DTS audio signals is played.

For Dolby Digital or DTS sources : These indicators change according to which channels are active in the source. When all three LS (left surround), S (surround) and RS (right surround) light at the same time it means a source with Surround EX or DTS-ES flag is being used.

L – Left front channel.

C – Center channel.

R – Right front channel.

LS – Left surround channel.

S – Surround channel (mono).

RS – Right surround channel.

LFE – Low Frequency Effects channel.

3 Analog level indicators

OVER – When the source signal is analog, this lights if the signal is in danger of distorting. Press INPUT ATT on the front panel to lower the signal level.

ATT – Lights when INPUT ATT is used to reduce the level of the analog source signal.

4 Speaker indicators

Light to indicate the current speaker system, A and/or B.

5 LOUDNESS indicator

Lights when the LOUDNESS mode is on.

6 H.P (headphones)

Lights when headphones are connected to the PHONES jack (speakers systems A and B both turn off automatically).

7 MIDNIGHT indicator

Lights when the MIDNIGHT LISTENING mode is on.

8 DSP indicator

Light when a DSP or Advanced Theater modes are selected.

9 STEREO indicator

Lights when a STEREO modes are selected.

10 Radio Frequency/Function indicator

Displays the function or the frequency of the current radio station.

11 DOLBY DIGITAL / dts mode indicators

DOLBY DIGITAL : When the DOLBY DIGITAL /dts mode on the receiver is on, this indicator lights to indicate playback of a Dolby Digital signal. However, DOLBY PRO LOGIC lights during 2 channel playback of Dolby Digital.

DOLBY PRO LOGIC : When the DOLBY DIGITAL /dts mode on the receiver is on, this indicator lights during 2 channel playback.

DTS : When the DOLBY DIGITAL /dts mode on the receiver is on, this indicator lights to indicate playback of a DTS signal.

THX : Lights when the HOME THX CINEMA mode is selected.

12 MASTER VOLUME indication

Displays current volume level.

13 TAPE 2 indicator

Lights when the TAPE 2 monitor is on.

14 Character display

Shows current mode, status, etc.

15 TUNER indicators

MONO : Lights when the tuner is set to receive FM broadcasts and when selected MPX mode.

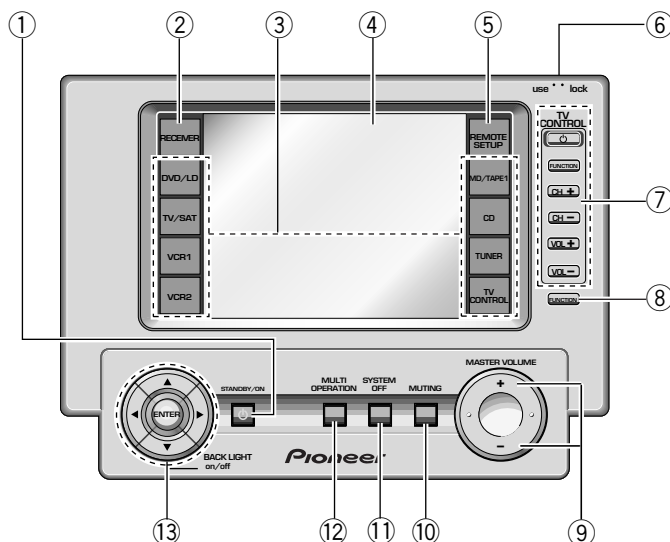
STEREO : Lights when a FM stereo broadcast is received in the auto stereo mode.

TUNED : Lights when a broadcast is received.

AM/FM : Light to indicate the current band (FM or AM).

Remote Control Unit (VSX-39TX)

These pages describe the buttons on the remote control used to operate the receiver. Since the screen on this LCD remote control changes when you select a different function, explanations of buttons for controlling other components/functions can be found in the sections for those components/functions.



To turn on the remote control touch it anywhere on the screen.

① **STANDBY/ON button**

Press to turn power of the receiver on or to STANDBY (off).

② **RECEIVER button**

Press to switch the remote control into receiver mode or to get receiver screens.

③ **Function buttons**

These buttons are the basic controls that switch the mode of the receiver and allow you to control your other components.

DVD/LD: Press to switch the remote control into DVD/LD mode.

TV/SAT: Press to switch the remote control into TV/SAT (satellite tuner) mode.

VCR 1: Press to switch the remote control into VCR 1 mode.

VCR 2: Press to switch the remote control into VCR 2 mode.

MD/TAPE 1: Press to switch the remote control into MD/TAPE 1 mode.

CD: Press to switch the remote control into CD mode.

TUNER: Press to switch the remote control into TUNER mode.

TV CONTROL: Press so that the remote control can operate the TV CONTROL commands.

④ **REMOTE CONTROL screen**

⑤ **REMOTE SETUP button.**

Use to customize the remote control functions and the remote control itself. (See "Setting Up Remote Control of Other Components" starting on)

⑥ **LOCK switch**

Use to lock the remote control so it doesn't turn on by accident. For normal use keep it set in USE.

⑦ **TV CONTROL buttons**

The following buttons are used to control the TV only and can be used once they are preset to control your TV.

STANDBY/ON : Press to turn the power of the TV on/off.

FUNCTION : Press TV FUNC to select the TV for remote control operation.

CH +/- : Use these buttons to change the channel of the TV.

VOL +/- : Press to control the volume of the TV.

⑧ **FUNCTION button**

Press to select a source. The button will cycle through all the possible sources.

⑨ **MASTER VOLUME button**

Use to raise or lower the volume of the receiver.

⑩ **MUTING button**

Press to mute or restore the volume.

⑪ **SYSTEM OFF button**

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will be turned off.

For example : If you programmed power off in the SYSTEM OFF settings for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

⑫ **MULTI OPERATION button**

Use this button to start the MULTI OPERATION mode. for how to program and use the MULTI OPERATION mode.

⑬ **▲/▼(BACK LIGHT on/off)/◀/▶/ENTER buttons**

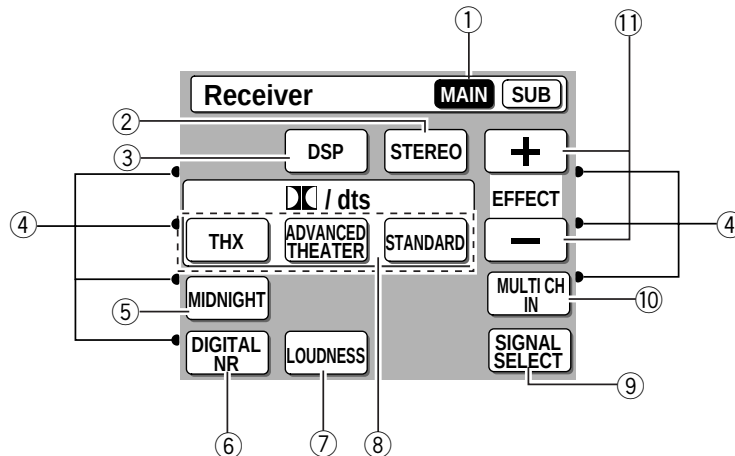
These buttons can be used for a variety of operations. In the SYSTEM SETUP menu, the ▲/▼ buttons can be used to adjust CHANNEL DELAY or CHANNEL LEVEL.

The ▲/▼ buttons, pressed simultaneously, can be use to lock or unlock a setting .

These buttons are also used to control the DVD menu for the DVD remote control screen. If the remote control is in the REMOTE SETUP mode you can use the ▼ button to adjust the BACKLIGHT.

Basic Receiver LCD Screens

Receiver MAIN Screen



① Receiver MAIN button

Press this button to select the main receiver screen (above) when the remote control is on the sub receiver screen.

② STEREO button

Switches the receiver into STEREO mode if it was in a different sound mode (like ADVANCED THEATER or THX CINEMA) or toggles between DIRECT and STEREO mode.

③ DSP button

Press repeatedly to select a DSP sound mode.

④ DIRECT FUNCTION on/off indicator

These dots indicate whether the DIRECT FUNCTION is on or off for the function (DVD/LD, CD, etc.) they point to.

⑤ MIDNIGHT button

Switches the MIDNIGHT LISTENING mode on or off (for all modes except THX and MULTI CH IN).

⑥ DIGITAL NR button

Switches the DIGITAL NR on or off (for all modes except THX and MULTI CH IN).

⑦ LOUDNESS button

Switches the LOUDNESS mode on or off (for all modes except THX and MULTI CH IN).

⑧ DOLBY / dts buttons

Press these buttons to put the receiver in the selected surround sound mode. For more information on the modes.

⑨ SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal (DVD/LD, TV/SAT, CD, MD/TAPE 1, VCR 1, VCR 2).

AC-3 RF : To select an RF signal (DVD/LD, TV/SAT, VCR 1, VCR 2).

AUTO : This is the default. If there are analog, digital and RF signals input, the receiver automatically selects the RF signal. If there are analog and digital signals input the digital will be selected.

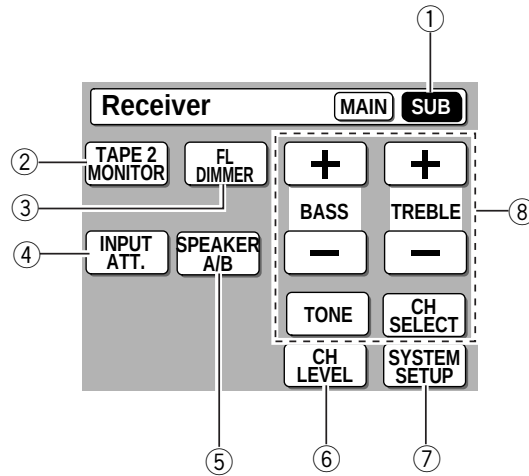
⑩ MULTI CH IN button

Use to hook up an external component that can decode other types of signals and input them into the VSX-39TX.

⑪ EFFECT +/- button

Use these buttons to increase or decrease the amount of effect applied in a DSP or Advanced Theater mode. When the amount of effect is increased in a DSP/Advanced Theater mode the characteristics of that mode become stronger and more noticeable. The scale ranges from 10-90 with 70 as the default setting. First turn on the DSP/Advanced Theater mode you want (by pressing the DSP/Advanced Theater button until you get the mode) and then increase or decrease the amount of effect.

Receiver SUB Screen

① **Receiver MAIN button**

Press this button to select the main receiver screen (above) when the remote control is on the sub receiver screen.

② **STEREO button**

Switches the receiver into STEREO mode if it was in a different sound mode (like ADVANCED THEATER or THX CINEMA) or toggles between DIRECT and STEREO mode.

③ **DSP button**

Press repeatedly to select a DSP sound mode.

④ **DIRECT FUNCTION on/off indicator**

These dots indicate whether the DIRECT FUNCTION is on or off for the function (DVD/LD, CD, etc.) they point to.

⑤ **MIDNIGHT button**

Switches the MIDNIGHT LISTENING mode on or off (for all modes except THX and MULTI CH IN).

⑥ **DIGITAL NR button**

Switches the DIGITAL NR on or off (for all modes except THX and MULTI CH IN).

⑦ **LOUDNESS button**

Switches the LOUDNESS mode on or off (for all modes except THX and MULTI CH IN).

⑧ **Dolby/DTS buttons**

Press these buttons to put the receiver in the selected surround sound mode. For more information on the modes .

⑨ **SIGNAL SELECT button**

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal (DVD/LD, TV/ SAT, CD, MD/TAPE 1, VCR 1, VCR 2).

AC-3 RF : To select an AC-3 RF signal (DVD/LD, TV/ SAT, VCR 1, VCR 2).

AUTO : This is the default. If there are analog, digital and AC-3 RF signals input, the receiver automatically selects the AC-3 RF signal. If there are analog and digital signals input the digital will be selected.

⑩ **MULTI CH IN button**

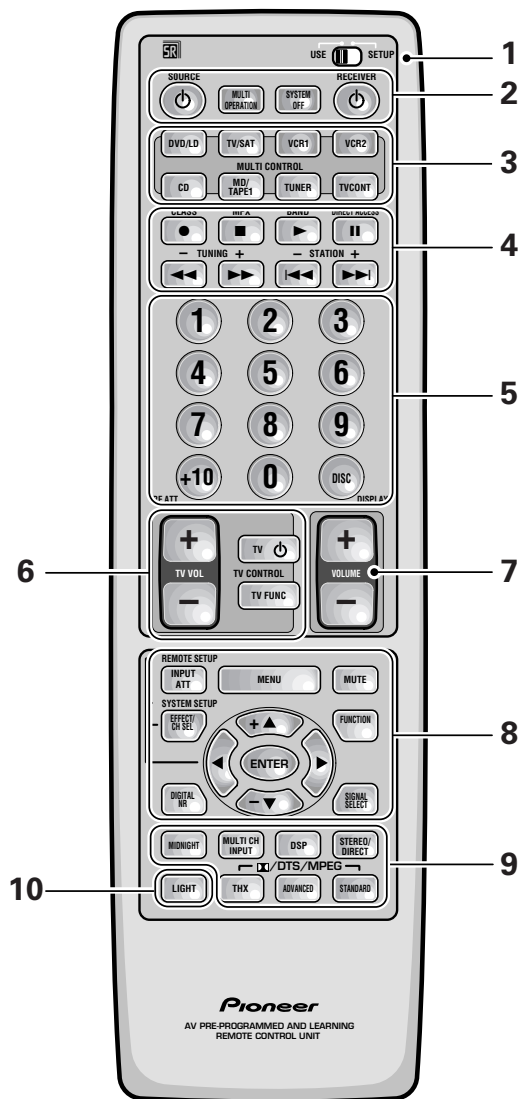
Use to hook up an external component that can decode other types of signals and input them into the VSX-39TX.

⑪ **EFFECT +/- button**

Use these buttons to increase or decrease the amount of effect applied in a DSP or Advanced Theater mode. When the amount of effect is increased in a DSP/Advanced Theater mode the characteristics of that mode become stronger and more noticeable. The scale ranges from 10-90 with 70 as the default setting. First turn on the DSP/Advanced Theater mode you want (by pressing the DSP/Advanced Theater button until you get the mode) and then increase or decrease the amount of effect.

■ Remote Control Unit (VSX-37TX/VSX-36TX/VSX-D909S)

These pages describe the buttons on the remote control used to operate the receiver.



1 USE/SETUP slide switch

Use to put the remote into receiver SETUP, or receiver USE mode.

2 SOURCE button

Use to turn on the power of your other components after you have recalled or taught the signals to this remote control.

MULTI OPERATION button

Use this button to start the MULTI OPERATION mode. for how to program and use the MULTI OPERATION mode.

SYSTEM OFF button

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will also be turned off .

For example : If you programmed power on for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

RECEIVER button

Press to turn power of the receiver on or to STANDBY (off).

3 MULTI CONTROL buttons

Use these to select a source and the corresponding remote operation mode.

For example, pressing TUNER selects the built in tuner and sets the remote operation to the tuner functions.

4 Component Control buttons

Use to control specific components, like a CD player or DVD player, after you have programmed the remote control to do these operations and the remote is put in that operation mode.

5 Number buttons

These buttons can perform a variety of different functions depending on the remote operation mode. They are most useful for CD and tuner operations.

6 TV CONTROL buttons

The following buttons are used to control the TV only and can be used no matter what function the remote control is set to.

TV SOURCE button – Press to turn the power of the TV on/off.

TV FUNC button – Press TV FUNC to select the TV for remote control operation.

TV VOL +/- button – Use to adjust the TV volume.

7 MASTER VOLUME buttons

Use to raise or lower the volume of the receiver.

8 INPUT ATT button (when USE mode is selected)

Use to lower the input level of an analog signal that is too powerful, thus causing the sound to distort (the OVERLOAD indicator will light).

REMOTE SETUP button (when SETUP mode is selected)

Use to customize the remote control functions and the remote control itself. (See "Setting Up the Remote Control to Control Other Components" starting on , "Multi Operation" starting on)

MENU button

Use to get the various menus for your TV or DTV.

MUTING button

Press to mute or restore the volume.

EFFECT/CH SEL (when USE mode is selected) button

EFFECT – Use these buttons to increase or decrease the amount of effect applied in a DSP or Advanced Theater mode. When the amount of effect is increased in a DSP/Advanced Theater mode the characteristics of that mode become stronger and more noticeable. The scale ranges from 10-90 with 70 as the default setting. First turn on the DSP/Advanced Theater you want (by pressing the DSP/Advanced Theater button until you get the mode) and then increase or decrease the amount of effect.

CH SEL – You may want to adjust the channels when listening to some sound sources. Use this button to select the channel you want to adjust.

SYSTEM SET UP button (when SETUP mode is selected)

Use to set up the speaker and sound systems. For more information see "Setting up for Surround Sound" starting on .

FUNCTION button

Press to select a source. The button will cycle through all the possible sources.

▲(+)/▼(-)/◀/▶/ENTER buttons

Use to operate the on-screen menu on your TV screen and enter commands when setting up surround sound, speakers levels & settings, and other set up features . Specific use of these buttons is described in conjunction with the operations they perform. For more information see each individual section.

DIGITAL NR button

Press to switch Digital NR on or off.

SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG – Analog signal.

DIGITAL – Digital signal (DVD/LD, TV/SAT, CD, MD/TAPE 1/CD-R, VCR 1/DVR, VCR 2).

AC-3 RF (VSX-37TX only) – RF signal (DVD/LD, TV/SAT, VCR 1, VCR 2).

AUTO – This is the default. If there are both analog, digital, RF input signals, the receiver automatically selects the best possible signal.

9 MIDNIGHT button

Switches the MIDNIGHT mode on or off.

MULTI CH INPUT button

Press to switch to MULTI CH IN mode.

DSP button

Press repeatedly to select a DSP sound mode.

STEREO/DIRECT button

Switches the receiver into STEREO mode if it was in a different sound mode (like ADVANCED THEATER) or toggles between DIRECT and STEREO mode. For more on STEREO mode .

DIRECT playback bypasses the tone controls and channel level for the most accurate reproduction of a program source.

LIGHT button

Press to light the remote control buttons.

Dolby /DTS buttons

Press these buttons to put the receiver in the selected sound mode. For more information on the sound modes.

8.2 SPECIFICATIONS

VSX-39TX :

Continuous average power output of 120 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion (front).**

Audio Section

Continuous Power Output

Front 120 W + 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)
Center 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)
Rear 120 W + 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)

Input (Sensitivity/Impedance)

PHONO MM 4.7 mV/47 k Ω
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 335 mV/47 k Ω

Phono Overload level (T.H.D.0.1 %, 1 kHz)

PHONO MM 120 mV

Frequency Response

PHONO MM 20 Hz to 20,000 Hz $\pm$ 0.3 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 5 Hz to 100,000 Hz dB

Output (Level/Impedance)

VCR 1/DVR REC, VCR 2 REC, MD/TAPE 1/CD-R REC
TAPE 2 REC 335 mV/2.2 k Ω

Tone Control

BASS $\pm$ 6 dB (100 Hz)
TREBLE $\pm$ 6 dB (10 kHz)
LOUDNESS +10 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM 80 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1, TAPE 2 101 dB
MULTI CHANNEL IN 105 dB(Channel Level:Bypass)

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM 80 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 83 dB

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

** Measured by Audio Spectrum Analyzer.

Maintenance of External Surfaces

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

Video Section

Input (Sensitivity) 1 Vp-p/75 Ω
Output (Level/Impedance) 1 Vp-p/75 Ω
Signal-to-Noise Ratio 65 dB
Frequency Response 5 Hz to 10 MHz dB

Component Video Section

Input (Sensitivity) 1 Vp-p/75 Ω
Output (Level/Impedance) 1 Vp-p/75 Ω
Signal-to-Noise Ratio 65 dB

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz
Usable Sensitivity Mono: 13.2 dBf, IHF (1.3 μ V/75 Ω)
50 dB Quieting Sensitivity Mono: 20.2 dBf
Stereo: 38.6 dBf
Signal-to-Noise Ratio Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)
Distortion Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity 60 dB (400 kHz)
Stereo Separation 40 dB (1 kHz)
Frequency Response 30 Hz to 15 kHz ($\pm$ 1) dB
Antenna Input 75 Ω unbalanced

AM Tuner Section

Frequency Range 530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna) 350 μ V/m
Selectivity 25 dB
Signal-to-Noise Ratio 50 dB
Antenna Loop antenna

Miscellaneous

Power Requirements AC 120 V, 60 Hz
Power Consumption 460 W, 630 VA
Power Consumption in Standby mode 1.0 W
AC Outlet
SWITCHED (x2) Total 100 W (0.8 A) MAX
UNSWITCHED 100 W (0.8 A) MAX
Dimensions 457 (W) $\times$ 174 (H) $\times$ 470 (D) mm
(17-15/16 (W) $\times$ 6-13/16 (H) $\times$ 18-1/2 (D) in.)
Weight (without package) 17.2 kg (37 lb 15 oz)

Furnished Parts

FM wire Antenna 1
AM Loop Antenna 1
"AA" IEC LR6 batteries 4
Remote Control Unit 1
Touch Pen 1
Cushion for Remote 4
Operating Instructions 1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

Amplifier Section

VSX-37TX :

Continuous average power output of 120 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

VSX-36TX:

Continuous average power output of 100 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

VSX-37TX :

Continuous Power Output

Front 120 W + 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)
Center 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)
Rear 120 W + 120 W (20 Hz-20 kHz, 0.09 %, 6 Ω)

VSX-36TX :

Continuous Power Output

Front 100 W + 100 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Center 100 W (20 Hz-20 kHz, 0.09 %, 8 Ω)
Rear 100 W + 100 W (20 Hz-20 kHz, 0.09 %, 8 Ω)

Audio Section

Input (Sensitivity/Impedance)

PHONO MM 4.7 mV/47 k Ω
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 335 mV/47 k Ω

Phono Overload level (T.H.D.0.1 %, 1kHz)

PHONO MM 120 mV

Frequency Response

PHONO MM 20 Hz to 20,000 Hz $\pm$ 0.3 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 5 Hz to 100,000 Hz dB

Output (Level/Impedance)

VCR 1/DVR REC, VCR 2 REC, MD/TAPE 1/CD-R REC
TAPE 2 REC 335 mV/2.2 k Ω

Tone Control

BASS $\pm$ 6 dB (100 Hz)
TREBLE $\pm$ 6 dB (10 kHz)
LOUDNESS +10 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM 80 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1CD-R, TAPE 2 101 dB
MULTI CHANNEL IN 105 dB(Channel Level:Bypass)

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM 80 dB
VCR 1/DVR, VCR 2, DVD/LD, TV/SAT, VIDEO, CD
MD/TAPE 1/CD-R, TAPE 2 83 dB

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

** Measured by Audio Spectrum Analyzer.

Video Section

Input (Sensitivity) 1 Vp-p/75 Ω
Output (Level/Impedance) 1 Vp-p/75 Ω
Signal-to-Noise Ratio 65 dB
Frequency Response 5 Hz to 10 MHz dB

Component Video Section

Input (Sensitivity) 1 Vp-p/75 Ω
Output (Level/Impedance) 1 Vp-p/75 Ω
Signal-to-Noise Ratio 65 dB

FM Tuner Section

Frequency Range 87.5 MHz to 108 MHz
Usable Sensitivity Mono: 13.2 dBf, IHF (1.3 μ V/75 Ω)
50 dB Quieting Sensitivity Mono: 20.2 dBf
Stereo: 38.6 dBf
Signal-to-Noise Ratio Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)

Distortion Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity 60 dB (400 kHz)
Stereo Separation 40 dB (1 kHz)
Frequency Response 30 Hz to 15 kHz ($\pm$ 1) dB
Antenna Input 75 Ω unbalanced

AM Tuner Section

Frequency Range 530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna) 350 μ V/m
Selectivity 25 dB
Signal-to-Noise Ratio 50 dB
Antenna Loop antenna

Miscellaneous

Power Requirements AC 120 V, 60 Hz

VSX-37TX :

Power Consumption 460 W, 630 VA
Power Consumption in Standby mode 1.0 W
AC Outlet
SWITCHED (x2) Total 100 W (0.8 A) MAX
UNSWITCHED 100 W (0.8 A) MAX
Dimensions 420 (W) $\times$ 173 (H) $\times$ 470 (D) mm
(16-9/16 (W) $\times$ 6-13/16 (H) $\times$ 18-1/2 (D) in.)
Weight (without package) 15.2 kg (33 lb 9 oz)

VSX-36TX :

Power Consumption 400 W, 550 VA
Power Consumption in Standby mode 1.0 W
AC Outlet
SWITCHED (x2) Total 100 W (0.8 A) MAX
UNSWITCHED 100 W (0.8 A) MAX
Dimensions 420 (W) $\times$ 173 (H) $\times$ 470 (D) mm
(16-9/16 (W) $\times$ 6-13/16 (H) $\times$ 18-1/2 (D) in.)
Weight (without package) 14.4 kg (31 lb 13 oz)

Furnished Parts

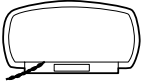
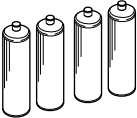
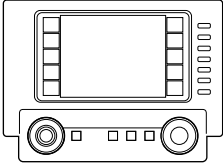
FM wire Antenna 1
AM loop Antenna 1
"AA" IEC LR6 batteries 2
Remote Control Unit 1
Operating Instructions 1

NOTE:

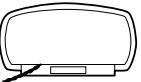
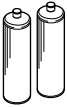
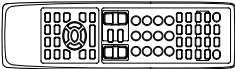
Specifications and the design are subject to possible modifications without notice, due to improvements.

VSX-39TX, VSX-37TX, VSX-36TX, VSX-D909S

Accessories (VSX-39TX)

					
FM wire antenna (ADH7007)	AM loop antenna (ATB7009)	“AA” IEC LR6 batteries x 4	Remote control unit (Remocon39 : AXD7254)	Touch pen (E-AA1445-001)	Cushion for Remote x 4 (AXG7080)

Accessories (VSX-37TX/VSX-36TX/VSX-D909S)

			
FM wire antenna (ADH7007)	AM loop antenna (ATB7009)	“AA” IEC LR6 batteries x 2	Remote control unit (Remocon37 : AXD7257) VSX-37TX/VSX-36TX (Remocon909S : AXD7278) VSX-D909S